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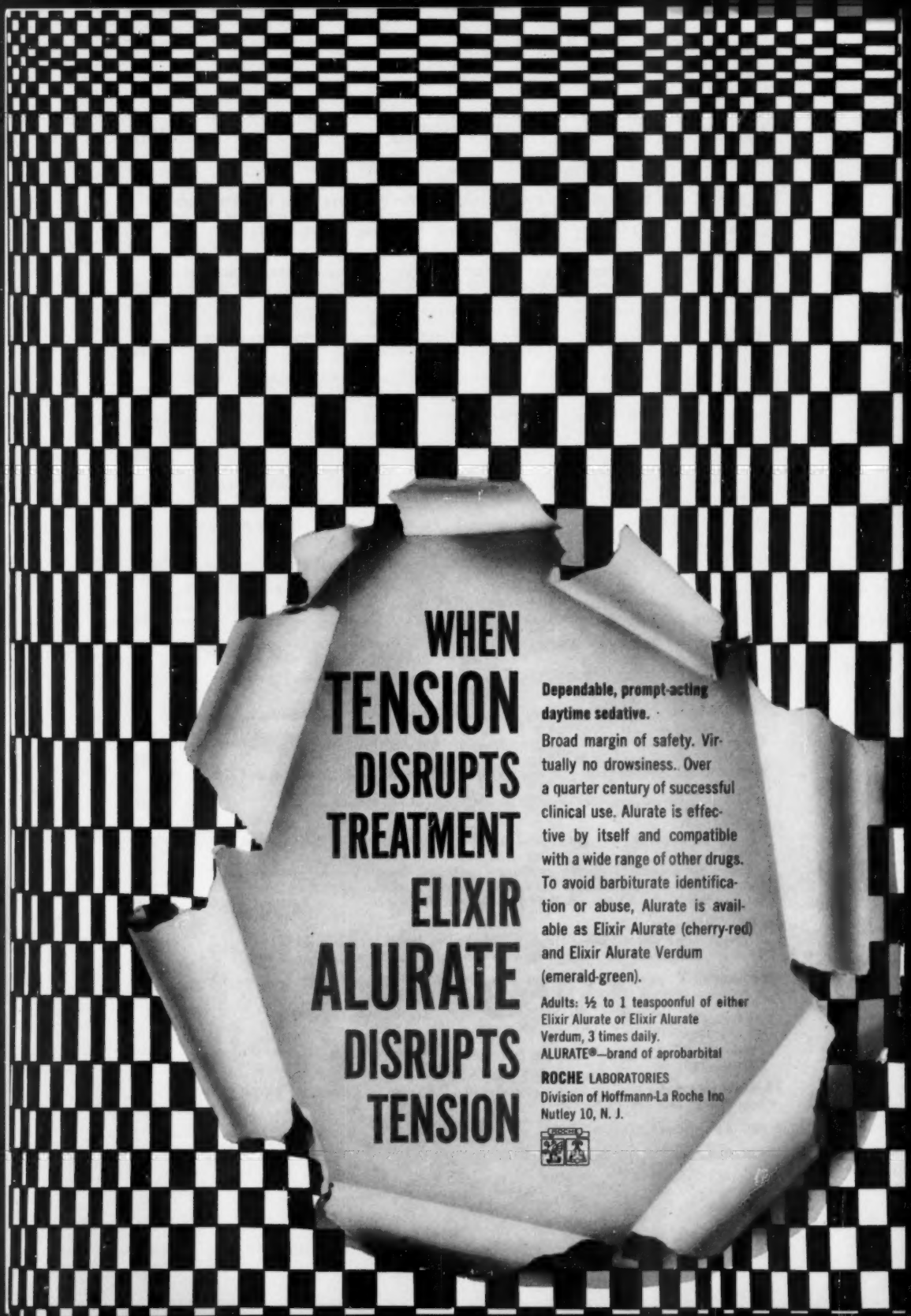
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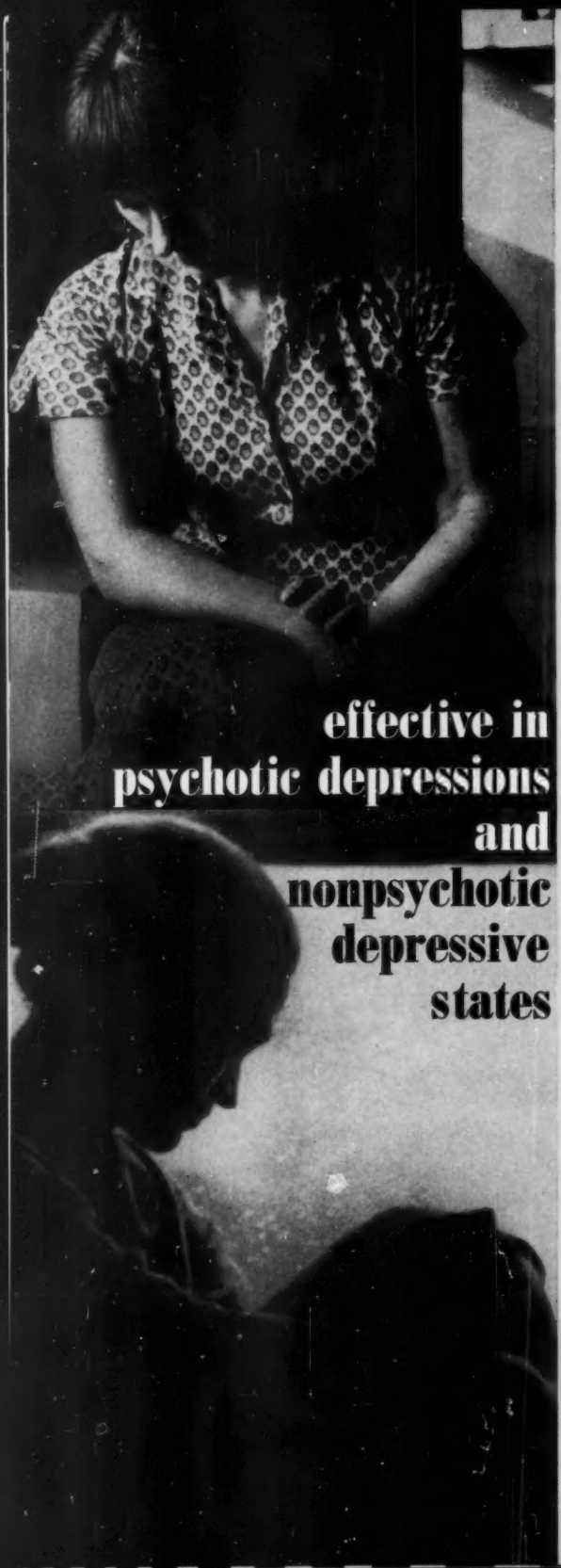

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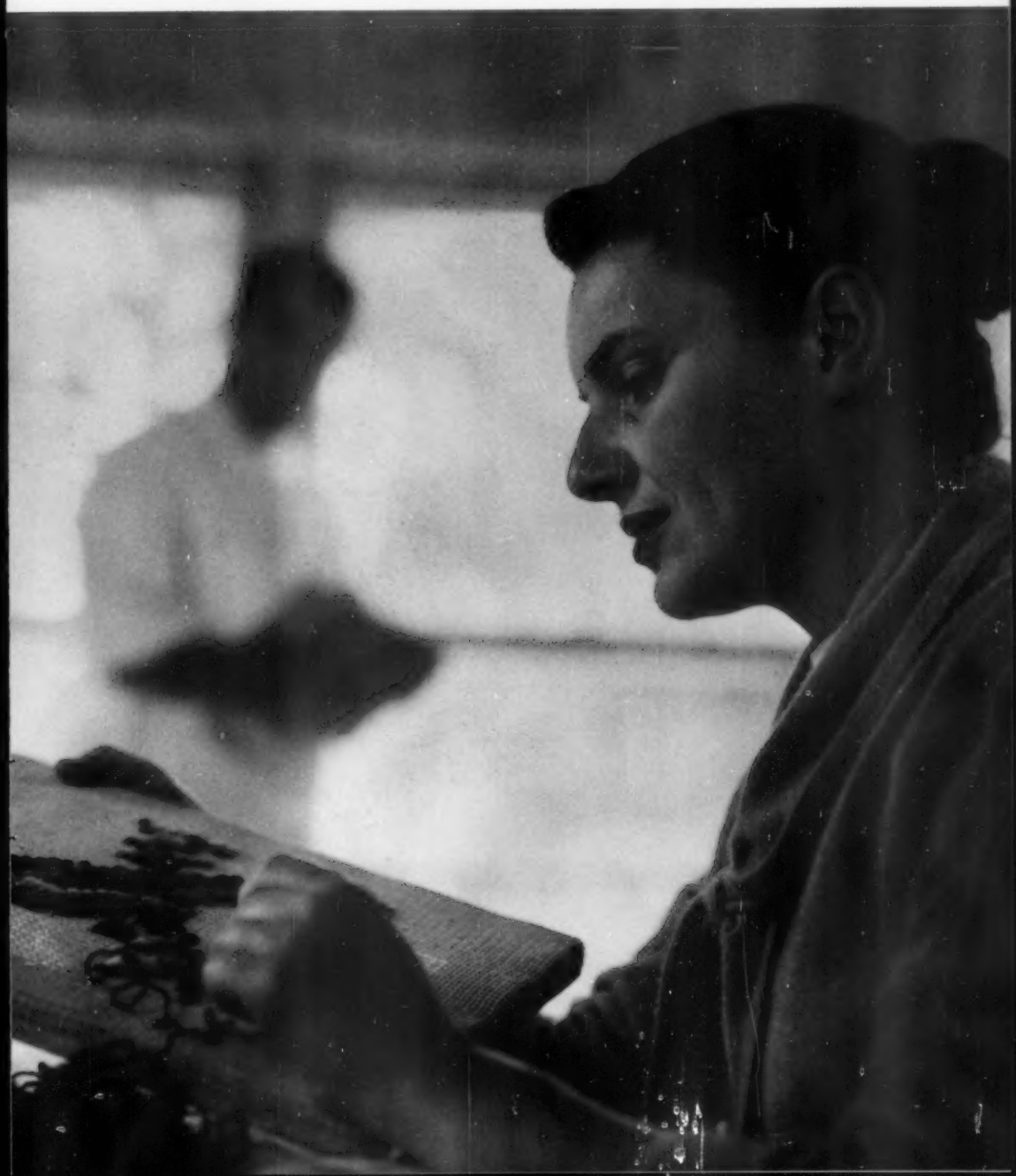

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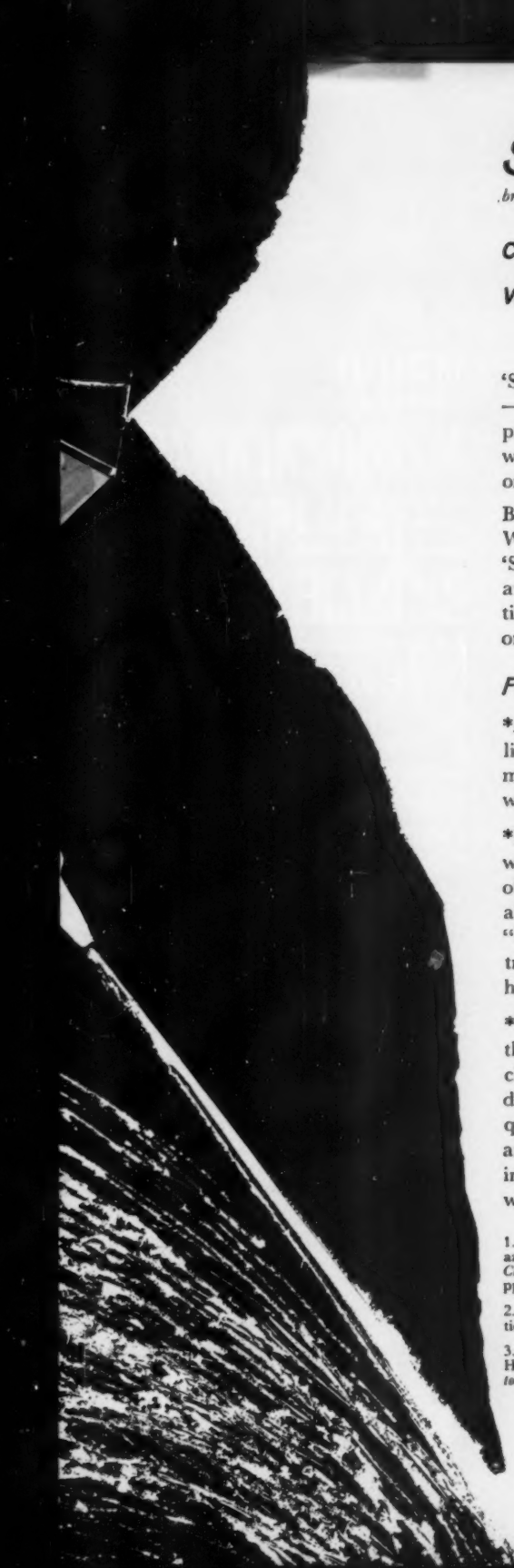

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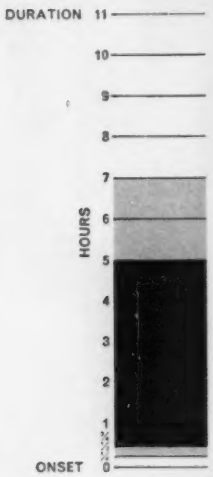

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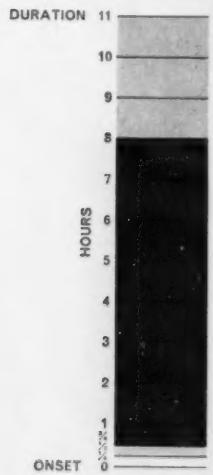

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DIAGNOSTIC AND DEMOGRAPHIC CHARACTERISTICS OF PATIENTS SEEN IN OUTPATIENT PSYCHIATRIC CLINICS FOR AN ENTIRE STATE (MARYLAND): IMPLICATIONS FOR THE PSYCHIATRIST AND THE MENTAL HEALTH PROGRAM PLANNER [1]

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This paper [5] presents some of the findings of the first comprehensive study on the characteristics of psychiatric clinic outpatients of an entire State. Data were collected on the age, sex, color, place of residence, and mental disorder of every Maryland resident seen in a mental health clinic in the State or in nearby areas serving residents of the State during the year ending June 30, 1959. A mental health clinic was defined as "an administratively distinct psychiatric service for outpatients where a psychiatrist is in attendance at regularly scheduled hours and takes the medical responsibility for all the patients." It is our intention to demonstrate the usefulness to the psychiatrist, mental health program planner, sociologist and epidemiologist of such data obtained for an entire geographic area and therefore referable to a population base for computation of admission and termination rates.

The first point we wish to emphasize is that our data are not a description of the distribution of mental disorders in various population groups but rather of those receiving defined psychiatric services. The availability of various psychiatric facilities and supporting services, clinic policies, cultural attitudes toward seeking and accepting psychiatric help, sophistication in recognizing psychiatric symptomatology, and community resources for case finding—all are selective factors determining who comes to clinics. As a result, the relation of the clinic population to the total mentally ill population is not known. For example, disturbed individuals seen by private psychiatrists, the Special Services Division of the Baltimore City Board of Education, probation services of the juvenile court, and social agencies are excluded. It has been estimated by various studies (1-3) that 10% or more of the noninstitutionalized population are suffering from psychiatric disorders. Our figures, which indicate that less than one-half of 1% of the population are seen in a psychiatric clinic in a year, point to a large discrepancy between the total number who may be mentally ill and the number who are receiving outpatient services (4).

DEMOGRAPHIC CHARACTERISTICS

Table 1 compares the Maryland clinic admission rates for children and adults by place of residence and with national estimates. Rates adjusted for differences in the age distribution by place of residence were also computed. This adjustment modifies the figures in Table 1 slightly but does not affect the direction of the differences. Also we have estimated that rates based on number of individuals rather than on number of admissions would be approximately 5% lower for all groups.

In the more rural counties, clinic services are primarily for children while services for adults receive less emphasis. The relatively high rate for children in these counties reflects the use of the mental health clinic for

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[5] This paper presents part of the findings of a methodological study of psychiatric clinic outpatients conducted by Dr. Bahn for the National Institute of Mental Health, Maryland State Department of Health, and the Johns Hopkins University School of Hygiene and Public Health. A monograph presenting detailed findings is in preparation.

TABLE 1

Admission Rates to Outpatient Psychiatric Clinics per 100,000 Population, by Major Age Group and Place of Residence : Maryland Residents, July 1, 1958 to June 30, 1959, and Estimated United States Total 1955

PLACE OF RESIDENCE	TOTAL	PATIENTS UNDER 18 YEARS OF AGE	PATIENTS 18 YEARS OF AGE AND OVER
Total Maryland, 1958-59	285	292	280
Baltimore City	405	266	473
Metropolitan counties	220	258	197
Nonmetropolitan counties	230	386	141
United States (estimate) * 1955	164	248	120

* Based on Bahn, A. K. and Norman, V. B. : First National Report on Patients of Mental Health Clinics, Public Health Rep. 74 : 943-956, November 1959.

school psychological services and as a casework and court diagnostic facility because of the lack of other community resources. If the special school services in Baltimore City were included in our statistics, the clinic admission rate for Baltimore City children would be more than tripled. The clinic data on rates of admission therefore indicate that where school systems lack testing facilities and where ancillary agency services are minimal, mental hygiene clinics tend to be dominated by service demands for psychological testing of children and social services. The uniformity, however, with which all clinics report long waiting lists for treatment of children indicates a marked inadequacy of services in all geographic areas.

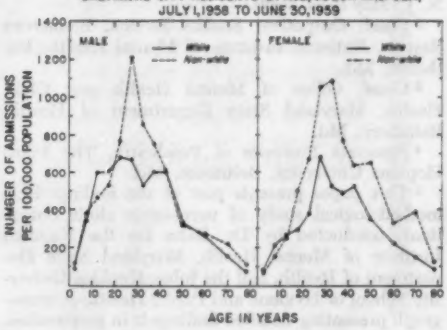
The decrease in adult psychiatric rates from the more to the less urbanized area demonstrated in Table 1 for outpatients is similar to earlier findings which indicate that highest rates of hospitalization for schizophrenia occur in areas of high population mobility and density(5-7). The extent to which this gradient reflects differences in available services or differences in ecology (and in turn, ecological factors may represent cause or effect) is not known. There can be little doubt, however, that it reflects in part a deficiency of services for adults in the rural counties. Medical school and state mental hospital clinics are located in the large urban centers and are therefore relatively inaccessible to rural residents. In order to improve services to the rural posthospitalized patient, a system of referrals from state mental hospitals to county mental hygiene clinics and health departments is now being initiated.

Within Baltimore City, rates for nonwhites for some age groups in early adulthood are almost twice as high as those for whites (Figure 1), this large difference by color paralleling the rates of first admission to the state mental hospitals of Maryland (8), Ohio(9), and New York(10). Our findings are contrary, however, to those of the Baltimore Chronic Illness Survey(1) of a sample of the general population. The authors cite examination by white clinicians, differences in age distribution, and selective factors of hospitalization, as possible reasons for the low prevalence of certain mental disorders found for nonwhites. Differences in the methods of the two studies must also be considered : in the Baltimore Survey a sample of the general population was examined by internists whereas the present study is based upon people with psychiatric complaints who presented themselves at a clinic. Our data, indicating differences between whites and nonwhites, emphasize the need to explore the relation of such factors as socioeconomic level and differential migration (into and out of the city) to psychiatric illnesses, as well as the need to investigate differential utilization of facilities by whites and nonwhites.

Another significant finding is that clinic admission and termination rates are con-

FIGURE 1

ADMISSION RATES TO OUTPATIENT PSYCHIATRIC CLINICS, BALTIMORE CITY RESIDENTS BY AGE, COLOR AND SEX, JULY 1, 1958 TO JUNE 30, 1959



siderably higher for boys than girls. This finding has been observed in national statistics(11). We note here, in addition, the sex differential by diagnostic category—higher rates are observed for personality disorders, adjustment reactions, brain syndromes, and mental deficiency (Table 2). More boys than girls are admitted to nearly every clinic reporting to the study. In addition, more boys than girls are referred by almost every type of community agency. These data may reflect different and more obtrusive behavior deviations in males resulting in greater community intolerance, or more parental concern for boys; however, the higher morbidity rate among male children is well documented in other handicapping conditions also(12), and mortality in utero is higher for males(13). This suggests the need for intensive research into possible causes of these differences.

Interestingly, by about age 30, white female rates are as high as male and thereafter they are not dissimilar (Figure 2); among nonwhites, rates are higher for females than males at older ages (see Figure 1). First admission rates to mental hospitals, however, including private and public hospital data, and estimates for Veterans Administration hospitals, are somewhat higher for males than females(14).

Children under 5 and adults 65 years and over have the lowest rates of admission to clinics; high rates for school children are followed by a decline in late adolescence, a secondary rise at ages 30 to 40 years, followed by another decline. Low rates for children under 5 years may be the result of a low prevalence of disorders, difficulty in detecting pathology, or reluctance to refer young children for psychiatric help. This is an area in which further knowledge is needed for control of mental illness. The data suggest, however, that case finding should be intensified. A pilot project in early case finding among preschool children has been initiated in well-baby clinics in Maryland. Infants and preschool children showing deviations in development and behavior are being referred for psychological evaluation.

The decline in clinic admissions at the end of adolescence appears to reflect the withdrawal of the school as the principal referral agent. Possibly, also, this is a period

FIGURE 2

ADMISSION RATES TO OUTPATIENT PSYCHIATRIC CLINICS, MARYLAND WHITE RESIDENTS BY AGE AND SEX, JULY 1,1958 TO JUNE 30,1959

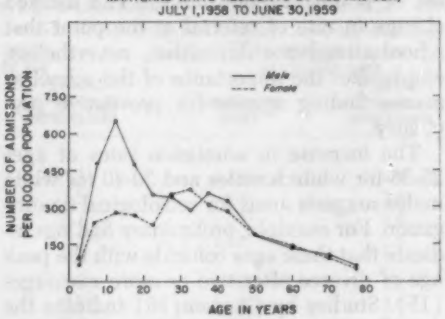


TABLE 2

Termination Rates from Outpatient Psychiatric Clinics per 100,000 Population: Maryland Residents under 18 Years of Age, by Color and Sex, and by Mental Disorder, July 1, 1958 to June 30, 1959

MENTAL DISORDER	TOTAL	WHITE		NONWHITE	
		MALE	FEMALE	MALE	FEMALE
Total	269.2	386.1	189.6	285.1	159.9
Brain syndromes	38.4	43.4	27.1	68.0	34.6
Mental deficiency	44.3	52.1	36.9	57.8	27.5
Psychotic disorders	12.5	15.5	7.2	16.2	17.3
Psychophysiologic autonomic and visceral disorders	4.6	5.3	4.1	4.1	4.1
Psychoneurotic disorders	26.2	29.7	25.9	15.2	22.4
Personality disorders	57.9	95.3	29.5	55.8	14.3
Transient situational personality disorders	64.7	95.1	45.3	44.6	31.6
Without mental disorder	10.9	16.5	6.2	11.2	6.1
Not stated	9.8	13.3	7.4	12.2	2.0

of relatively low stress, coming after a period of academic demands and prior to the onset of family responsibilities. The marked change in rate of referral at the point that school attendance diminishes, nevertheless, emphasizes the importance of the school as a case finding agency for preventive psychiatry.

The increase in admission rates at ages 25-35 for white females and 30-40 for white males suggests areas for sociological investigation. For example, preliminary findings indicate that these ages coincide with the peak age of divorce after two or more marriages (15). Studies by Clausen(16) indicate the disruption of the marital relationship antecedent to hospitalization for mental illness, and those by Locke, *et. al.*(9), that rates of admission to public mental hospitals are highest for the separated and divorced. Information on the differential risk of admission to clinics by marital status is being planned for 1960 when denominator (census) data will be available.

The general decline in the clinic population past the age of 40 cannot be construed as an indication of diminishing mental pathology with age since it is accompanied by an increase in the rate of admission to inpatient care(11). The advent of new treatment methods, the declining resident mental hospital population(17, 18), and the growth of clinic services(19) can be expected to alter the present high ratio of inpatients to outpatients at these ages. The particularly low rates of admission to clinics for those 65 years and over concomitant with high rates of inpatient admissions, suggest that mental health clinics are not assuming a sufficiently important role in the care of geriatric patients. It is possible that intervention by a mental hygiene clinic could reduce the hospitalization rate for this group.

MENTAL DISORDERS AND SYMPTOMS

An important methodological contribution of this study, we believe, is that an impression of mental disorder was requested if a formal diagnosis could not be recorded. Clinic cooperation with this reporting procedure reduced the percentage of clinic patients, particularly children, with psychiatric classification not stated, from the national average of 22%(11) to a low of 2% in the present study. The reporting and coding process permits separate study of diagnoses and impressions. Twenty-two percent of the children's classifications and 4% of the adults' classifications were impressions (Table 3). The proportion of children's cases reported as impressions is highest for mental deficiency and lowest for psychotic disorders. In this paper, impressions have been included with diagnoses in the rate computations in order to describe the patients as completely as possible. Data were tabulated on the broad and detailed categories of mental disorders, on severity of mental deficiency, and on selected symptom syndromes, to test the usefulness of the detailed diagnostic codes of the Diagnostic and Statistical Manual of the American Psychiatric Association(20). Only highlights of the findings are presented here.

We might look first at the age trend in the rates for each major category of mental disorder. Since mental disorder is reported only on termination of clinic services, the rates represent the number of clinic terminations per 100,000 population. As reported by clinics, the age curve for brain syndromes (Figure 3) tends to show three peaks, reflecting several different types of disease entities. Brain syndromes associated with prenatal and paranatal factors such as congenital cranial anomaly, mongolism, birth trauma, convulsive disorder, and unknown organic etiologies peak at early ages and generally continue at about the same level through age 15 years. Only convulsive disorder and other brain trauma do not decline rapidly thereafter. Except for white females,

FIGURE 3

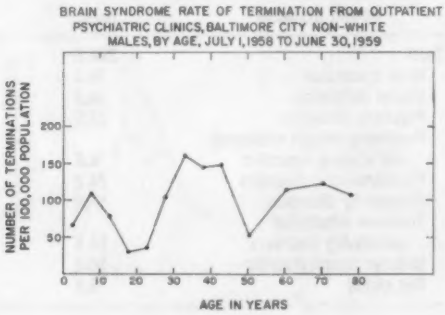


TABLE 3

Percent of Psychiatric Classifications Reported as Impressions, by Psychiatric Classification and Major Age Group : Maryland Resident Terminations from Outpatient Psychiatric Clinics, July 1, 1958 to June 30, 1959

PSYCHIATRIC CLASSIFICATION	PATIENTS UNDER 18 YEARS OF AGE		PATIENTS 18 YEARS OF AGE AND OVER	
	NUMBER OF CASES	PERCENT REPORTED AS IMPRESSIONS	NUMBER OF CASES	PERCENT REPORTED AS IMPRESSIONS
Total patients with a psychiatric classification	2,728	21.7	4,509	4.0
Brain syndromes	404	11.5	424	2.8
Mental deficiency	466	36.1	127	7.9
Psychotic disorders	131	5.3	1,521	1.6
Psychophysiologic autonomic and visceral disorders	48	8.3	83	1.2
Psychoneurotic disorders	275	9.5	1,314	2.6
Personality disorders	609	21.3	888	9.5
Transient situational personality disorders	680	18.2	71	19.7
Without mental disorder	115	40.0	81	2.5

acute and chronic brain syndromes associated with alcohol intoxication are the principal components of the rates between the ages 25 to 64 years. In late adult life, brain syndromes associated with cerebral arteriosclerosis and senile or presenile brain disease are predominant ; although based on small numbers of cases the higher nonwhite than white rates parallel the racial difference in the death rate from cerebrovascular accidents(21).

Mental deficiency without demonstrated organic cause is diagnosed in clinics primarily at school ages (5-14 years). At these ages it is more frequently reported than brain syndrome with mental deficiency (Table 4). The distinction between idiopathic and organic mental deficiency, however, is dependent almost entirely on the adequacy of diagnostic procedures and medical history. Children seen by a psychiatrist in our study are more likely to be classified with a brain syndrome than children seen only by a clinical psychologist. It is possible that this difference represents case selection rather than variation in case evaluation by profession. However, it is our belief that rates for organic mental deficiency are understated primarily because complete diagnostic service is frequently not available to the mentally deficient child.

The relatively high clinic rate for brain syndrome and other mental retardation combined noted for young children support the assertion that primary prevention of mental illness should begin with high quality prenatal and early natal care(22-24).

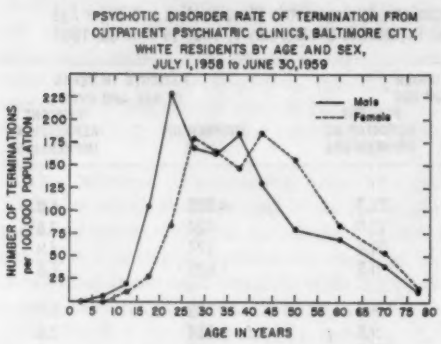
Psychotic disorders are rare below the age of 5 ; the rate rises exponentially in early adolescence (Figure 4) doubling in each

TABLE 4

Termination Rates from Outpatient Psychiatric Clinics per 100,000 Population : Maryland Residents under 20 Years of Age with Symptom of Mental Deficiency, by Mental Disorder and Age, July 1, 1958 to June 30, 1959

MENTAL DISORDER	TOTAL	AGE GROUP 0-4 YEARS	5-9 YEARS	10-14 YEARS	15-19 YEARS
Total rate for symptom of mental deficiency	62.8	42.1	89.5	76.4	41.0
Mental deficiency (idiopathic or familial)	43.1	17.4	65.0	59.1	35.3
Chronic brain syndrome with mental deficiency	19.7	24.8	24.4	17.3	5.7

FIGURE 4



subsequent 5-year age group to young adulthood and then begins to decline. The age curve for females is of the same general shape as that for males, but tends to be "displaced" about 5 to 10 years later on the age scale. This earlier peak in the male psychotic disorder rate has been noted in hospital studies(6, 25).

The psychoneurotic disorder rate rises somewhat earlier; for males the increment slackens in late adolescence so that adult female rates exceed male rates particularly among nonwhites. These disorders peak in early adulthood.

Adult psychotic disorder rates are almost twice as high for nonwhites as for whites (Table 5). For nonwhite females, psychoneurotic disorder rates are also relatively high. The fact that nonwhite male rates markedly exceed white male rates only for psychotic disorders raises interesting questions: is there selection in the kinds of referrals made to clinics, different diagnostic interpretations for each racial group, or are these real population differences in the relative frequency of various psychiatric illnesses?

As a group, personality disorders show the greatest difference by sex (Figure 5). In general during childhood, male rates are about three times as high as those for females and in adulthood they are about twice as high with some tendency for the female rate to peak at a later age than for males. Personality disorder rates generally decline by the age of 20 or 25 but some increase occurs around age 40 for whites due to alcoholism (addiction). (It is noteworthy that only 11 outpatients with drug addiction were reported.) The change in rates for personality disorders, with age, are provocative. What happens in adult years to individuals reported with personality disorders at younger ages? Do these persons appear instead in other "problem populations" such as in welfare or agency caseloads? Have the disorders changed to some other type such as psychotic disorders, or are individuals with personality disorders "immature" persons who eventually mature as suggested by studies of Glueck on criminals(26)?

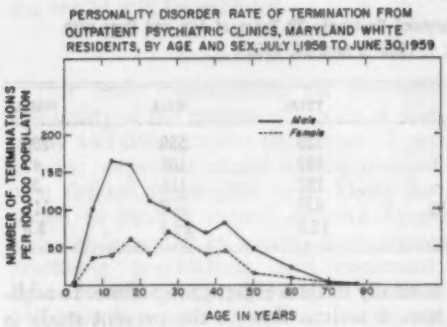
The most striking feature about transient situational personality disorders (adjustment

TABLE 5

Termination Rates from Outpatient Psychiatric Clinics per 100,000 Population: Maryland Residents 18 Years of Age and Over, by Mental Disorder, Sex and Color, July 1, 1958 to June 30, 1959

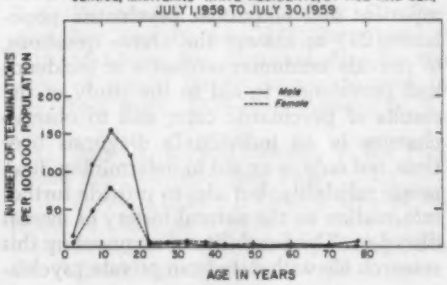
MENTAL DISORDER	TOTAL	MALE		FEMALE	
		WHITE	NONWHITE	WHITE	NONWHITE
Total	243.3	216.0	402.1	206.2	452.2
Brain syndromes	22.6	19.1	75.5	10.4	60.8
Mental deficiency	6.8	5.2	16.5	4.7	17.7
Psychotic disorders	81.1	61.5	145.3	73.3	169.6
Psychophysiologic autonomic and visceral disorders	4.4	4.2	4.3	3.5	11.3
Psychoneurotic disorders	70.0	54.5	63.3	73.1	143.4
Personality disorders	47.3	61.7	71.2	32.8	30.4
Transient situational personality disorders	3.8	3.8	2.9	3.6	5.7
Without mental disorder	4.3	3.6	12.2	3.4	5.7
Not stated	3.0	2.3	10.8	1.4	7.8

FIGURE 5



reactions) is their considerable numeric importance in childhood and abrupt decline at 18 years (Figure 6). Since there is no similar marked decline in other disorders, the phenomenon may be that referred to earlier —the sharp drop in school referrals—coupled with removal of relatively healthy young males from the general population by the armed forces. Another factor, we believe, is that many clinicians are reluctant in their diagnoses of children to consider the pathology as other than transient. From examination of clinic records we have noted cases diagnosed under the classification of "transient situational personality disorder" where the disturbance was neither transient nor situational but rather severe and prolonged. In a study of 80 pediatric outpatients of a psychiatric clinic, for example, all were found to have had symptomatology for at least 6 months, and half for at least 2 years (27). In addition, a serious deficiency in the nomenclature is the lack of a detailed classification within this rubric (adjustment reactions) which is quantitatively so important for child patients.

FIGURE 6



Psychophysiologic autonomic and visceral disorders constitute a numerically unimportant category (about 2%) among clinic patients, an interesting contrast to the findings of the Baltimore Chronic Illness Survey of a sample of the general population(1). In the latter study, a third of all psychiatric cases diagnosed by internists were classified with this disorder. Either this reflects a difference between the types of diagnoses made by psychiatrists and by internists, or, as we are inclined to believe, a relatively small proportion of persons with psychosomatic illnesses are referred to psychiatric clinics.

In addition to mental retardation discussed earlier, the prevalence of certain other manifestations of mental illness are of interest irrespective of psychiatric classification. Clinics were requested to report the symptom of "excessive drinking" in order to provide an estimate of the extent of this problem among the patient population. Patients with brain syndromes associated with alcohol intoxication or with the disorder of alcoholism (addiction) represent less than half of the adults 20 years of age and over reported as problem drinkers (Table 6). A total of 25% of male patients and 9% of female patients are reported with this symptom. These are minimum estimates since for another 20% of males and 10% of females this information is not available. Information on problem drinking is an aid not only in individual prognosis, but also in ecological studies on alcoholism, and in the planning of alcoholism control programs. We recommend, therefore, that this symptom be reported routinely.

In concluding this brief psychiatric description of clinic patients in Maryland, we wish to urge both: 1. Continued study to improve the standard psychiatric classification as we progress in knowledge of etiology and psychopathology, and 2. Intensive field studies to improve reliability and comparability in the use of current classifications. Although there are at present some deficiencies in both areas, as with other illnesses, progress can be made only by the persistent attempt to classify and count separate dis-

TABLE 6

Terminations from Outpatient Psychiatric Clinics: Maryland Residents 20 Years of Age and Over with Problem Drinking, by Sex, July 1, 1958 to June 30, 1959

MENTAL DISORDER	TOTAL	MALE	FEMALE
Total number with problem drinking	739	539	200
A. Brain syndromes associated with alcohol intoxication	152	105	47
B. Alcoholism (addiction)	152	115	37
C. Other mental disorders with symptom of excessive drinking	435	319	116
Problem drinkers as percent of total patients	16.8	25.4	8.8

ease entities. Although symptoms or manifestations of a disease are useful, the reporting of symptoms alone cannot advance knowledge without clinical synthesis of the symptoms in terms of etiology and pathology.

Discussion

In this paper we have presented some of the principal findings with respect to the demographic and psychiatric characteristics of the residents of a state who are outpatients of mental health clinics. These data, when related to a population base, point to large differences in the differential risk of clinic admission by age, sex, race, and place of residence. It would be of interest to compare these data with other health and welfare data in order to detect significant relationships.

Fact gathering on demographic and diagnostic characteristics of patients is the first step in reviewing a mental hygiene program in order to plan for comprehensive services. It enables one to specify who is being served and in what way. Only then is it possible to determine whether the actual pattern of service corresponds to an optimal plan based upon best available public health information(28).

We wish to encourage clinic studies in other geographic areas with large urban-rural and white-nonwhite populations for comparison with our findings. With the growing trend toward psychiatric treatment in the community as contrasted with treatment in the hospital, records from outpatient psychiatric facilities will become increasingly important in the study of persons who are referred to or seek psychiatric care.

The combined inpatient-outpatient population is a less-selected portion of the total mentally ill than either group alone. In addition, a serious flaw in the present study is the lack of follow-up information relating to the subsequent psychiatric experiences of patients. The fact that about a fifth of the patients are readmissions to the same clinic indicates that we are dealing with a group subject to recurrence of illness.

A cumulative psychiatric case register file is needed, therefore, to obtain a more complete picture of diagnosed mental illness, and to follow individuals longitudinally through these facilities to answer such questions as: What is the unduplicated count of individuals by age, sex, color, and diagnosis, who are admitted to, terminated from, or under the care of a psychiatric facility within the year? What proportion of individuals diagnosed for the first time in a psychiatric clinic are subsequently admitted to a psychiatric hospital within a specified time after clinic discharge? What is the subsequent psychiatric history of an individual following first significant release from a mental hospital? Is the number and composition of the psychiatric population seen in psychiatric facilities fairly constant from year to year, or are there substantial yearly increments and decrements?

It is our immediate plan in Maryland to set up a coordinated research file on the inpatient and outpatient psychiatric population(29) to answer the above questions, to provide minimum estimates of incidence and prevalence, to aid in the study of the results of psychiatric care, and to observe changes in an individual's diagnosis over time, not only as an aid in determining diagnostic reliability, but also to provide further information on the natural history of mental disorders. The feasibility of augmenting this research file with data from private psychia-

trists and from the non-psychiatric counseling center will be explored.

SUMMARY

This study demonstrates the feasibility and utility of the routine collection of diagnostic and demographic data from all psychiatric outpatient clinics serving residents of a defined geographic area. These data added to existing mental hospital figures and supplemented by reports from private practicing psychiatrists and community agencies not under a psychiatrist's direction will provide a more complete identification of the community's mental health problems, an important step toward the ecology of mental illness.

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DISCUSSION

ADDISON M. DUVAL, M.D. (Jefferson City, Mo.).—As a mental health program planner, I am very interested in using every available aid which may be helpful in our difficult assignment. I feel the authors of this report have

presented us with a specific additional method which will help to better identify the community's mental health needs.

In so stating, we should not be lulled into any sense of security about our total program, for this is but one aspect of the difficult estimate of psychiatric need which plagues the state program planner. Many additional yardsticks have been suggested, but none has been found to be entirely reliable. We have found that the use of mental health facilities in a state may be measured by the actual need for such facilities by mentally sick patients, but having said this, one is faced with the practical problem that one community refuses to use the facilities for reasons which are not even known to a second community. Such variant usability of the facilities may be based on prejudice, misinformation, financial ability or even religious antipathy for the hospital superintendent. Such things as the reputation of the hospital, its role and image in the community, and the attitude of the local press are also important.

There is reason to believe that there is little variation in the rate of psychosis from state to state. Yet the admission rate to state hospitals across America varies very widely. Missouri has the lowest state hospital admission rate of all the states—about 56 per 100,000 population. Yet the people of the state are not aware that there may be more psychotics in the Missouri community than in a state with 4 times our admission rate to its state hospitals. We also do not have enough outpatient clinics to serve the psychotics who presumably must be in the Missouri population. The practical question arises: where are these people and why don't they come to our attention?

Recent information points to the fact that short-term state hospital stay—with or without specific therapy—seems to reduce the chronicity of illness in days, months and years. Maybe our low admission rate (which in Missouri is not clearly understood) is another indication that generally we tend to hospitalize too many psychotic patients routinely—that if we would postpone such hospitalization for a time, it might actually be avoided entirely!

I have no specific quarrels with the authors of this paper. Their method adds another assist to the most complex decisions which face the mental health program planner, and for each of these we are most grateful. I would add a brief postscript to emphasize that (a) improved precision of psychiatric diagnosis would make this study more valuable, (b) the great need for follow-up studies of the case material presented as mentioned by the authors, and (c) to underscore and agree with the author's report that schools without test services will swamp the clinic staff with requests for psychological testing—often not indicated. In the same situation the school teacher will often wish to refer the aggressive boy and overlook the schizophrenic girl.

In my experience this can be almost entirely eliminated through an in-service psychiatric educational program for the teacher who can be taught to accurately estimate the seriousness of emotional disorders of children in her classroom.

THE AMSTERDAM MUNICIPAL PSYCHIATRIC SERVICE: A PSYCHIATRIC-SOCIOLOGICAL REVIEW [1]

PAUL V. LEMKAU, M.D., AND GUIDO M. CROCETTI, B.Sc.[2]

The personal experiences on which this report is based were obtained in the course of two visits to the Amsterdam Service.[3] In the first of these visits the psychiatrist author spent 10 days with the service, attending conferences, interviewing physicians and nurses, visiting facilities, and making patient visits with both physicians and nurses. The second visit was a part of a month-long study of a number of community psychiatric services, both rural and urban, in the Netherlands by two sociologists experienced in research on medical services. They spent two weeks with the Amsterdam service in the manner already described but, profiting by the prior experience of the psychiatrist, with a better planned series of observations and with more clearly defined questions to be investigated. They interviewed a sample of personnel drawn from all levels of the service as well as key individuals from related agencies. These interviews were semistructured in nature and the Dutch and German languages as well as English were used. Many were recorded on tape in order to permit a more leisurely and detailed analysis. These interviews were obtained as privileged and confidential communications and are here quoted directly only where the respondent has already indicated a similar view in publications or intended the quotation for public information. In some instances material is summarized. Misinterpretation under such circumstances is, of course, possible and such as occurs is the responsibility of the authors.

The Municipal Psychiatric Services of Amsterdam are comprehensive in scope. Their resources and services reach preschool children, children of school age, defectives, emotionally disturbed and handicapped persons, adult psychotics in the community and in the psychiatric wards of the general hospitals. The non-hospitalized (including psychopaths and police cases), the psychotic prior to hospitalization, during hospitalization and after hospitalization, and geriatric patients are included.

Other health, medical and welfare services in the community and general social agencies frequently work with the municipal mental hygiene services. These services are, on the whole, well integrated and interlocking. There has been, through the years, a certain amount of movement of personnel from one branch to another, and there are frequent conferences between the various agencies. A network of formal and informal interpersonal relationships make communication easy and rapid. Throughout our sample of interviews, with one exception, the same general ideology regarding the service and its effectiveness, and attitudes towards it, prevailed among all levels of personnel in all branches of the service, with of course, some difference in degree of elaboration. The one exception is that of a more psychodynamically oriented psychiatrist who was deeply concerned with the lack of provision for the neurotic patients and the relative absence of resources for intensive psychotherapy.

Only one part of this essentially integrated and comprehensive service will be discussed here, but it is important to bear in mind throughout the discussion that this one aspect is only part of an interlocking, mutually-sustaining system of which any part has access to the resources of all the other parts.

The particular aspects we wish to discuss are termed by the service itself, in the shorthand of bureaucratic jargon, "the post-care program, the pre-care program, and the emergency program." These are not three distinct entities. They share the same administrative staff, headquarters, and personnel.

[1] Read at the 116th annual meeting of The American Psychiatric Association, Atlantic City, N. J., May 9-13, 1960.

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This discussion will not include the conventional indices of program evaluation such as physician-patient ratio, nurse caseload or the statistics of visits and of patient movement. The intention is, rather, to discuss the ideology and attitudes, the practices and theoretic rationale, which appear to have important significance for the practice and development of social psychiatry.

The first program to be established was that for patients following psychiatric hospitalization, the post-care program. This program was the point of origin of much of the present system.

The way in which this system developed is probably significant for subsequent evolution of the psychiatric services in Amsterdam. In the Netherlands each community pays a *per diem* (per capita cost) for each resident of that community cared for in a mental hospital. At the inception of the program there were about 3,000 Amsterdam residents in Provincial and voluntary mental hospitals. This population was increasing at about 100 per year. This was a substantial and growing burden on the community already strained to recover from its very considerable losses in the War. The municipal authorities put a simple question to the municipal psychiatrists: "Could this population be reduced, or its rate of increase slowed?" It is important to note two things about this initiative, its origin and its motives. It originated in lay authority. Its major motive was economic, "How can we reduce costs?" Dr. Querido, the founder of the service, Dr. Gravesteyn, the present head of the service, and Dr. Piebenga, chief inspector for the Netherlands Hospitals, are all in agreement that economy was the major motive for the request. As Dr. Piebenga put it, "Economy was the mid-wife at the birth of the new program."

This is not to say that humanitarian and professional motives were completely absent. Amsterdam has a long history of providing adequate care for its mentally ill. But one of the main reasons for asking for change was an easily understood, reality-centered question and the goals implied were universally considered desirable. Given this origin and these motives, it is almost predictable that any reasonable answer would receive respectful consideration. The implications of this for community-based psychiatric program planning are obvious.

The response to the question was empirical and quantitative. Querido visited the mental hospitals, establishing contacts, reading histories and examining patients. We will not dwell on skillful handling of the complicated interpersonal processes that were involved in establishing mutually friendly contacts and working relationships with hospital personnel. Suffice to say that the painstaking efforts of those days still show their fruit in the persistence of easy, flexible, mutually cooperative relationships as a new generation of professional leadership takes over. It should also be noted that one of the stated motives for cooperation on the part of hospital administration was as reality-centered as the motivation of the community. Hospitals were markedly overcrowded and understaffed. Anything that would reduce the resident population in a reasonable and humane manner would increase hospital effectiveness and provide a higher level of professional satisfaction.

Querido established that 10 to 20% of the resident mental hospital population from Amsterdam was being retained in hospital after having achieved maximum potential benefits from their stay, simply because of lack of alternative facilities to which they could be discharged. Querido visualized these alternative facilities as consisting of first, limited medical supervision and, second, housing to provide an adequate place for the discharged patient to live.

The question of medical supervision was met by providing for a combination of "office" (visits to headquarters) and home visits. Much has been said about the institution of psychiatric home visits in Amsterdam, but at this point we only wish to note that it was functionally realistic. If one accepts responsibility for the supervision of a psychotic patient in the community, then it follows that the failure of that patient to appear for a scheduled appointment is a cause for concern and action rather than for rejection. Thus, in such a program, home visits are imperative whatever the reason for the patient's inability to appear at an outpatient clinic or office. At present every patient is seen at home at least once by a psychiatrist. This is usually a screening

visit for admission to the service. He then, at the daily staff conference, prescribes the frequency of visits by the nurse-social worker which average once every two weeks per patient. She in turn may request additional psychiatric home visits if she feels the patient requires them but is unable, or cannot be relied on, to come to the office.

Housing was a very real problem. In Amsterdam, housing has perennially been in short supply. The city had suffered relatively heavy war damage and has had during the post-war years an especially acute housing problem. In fact, it was not until July of 1959 that the number of new houses started in Amsterdam exceeded the number of new families formed in the same period.

One need hardly comment on the inability of the psychotic patient, especially when hospitalized, to compete successfully for such a hard-to-get commodity. Querido's solution was to have the psychiatric service compete for the psychotic. He sought housing for the psychotic patients returning from hospital and for their families. This was done, and to this day in the allocation of new housing, the post-hospitalized psychotic patient is considered.

The development of two facets of the program have thus far been traced, home visitation and housing. There is a third: employment. Many patients potentially available for discharge from psychiatric hospital were capable of work. For some, work could be found in the sheltered workshops and training schools. Querido determined to place other patients in the open labor market. For this, recourse was had to the state employment service.

Work appears to have a special place in the Dutch culture. It is an integral part of the concept of a normal way of life and Querido in his social psychiatry ascribes to it a therapeutic function as well.

In this connection note must be taken of the general employment situation in the Netherlands. For some time there has been a "tight" labor market, with as many or more job opportunities as there are applicants. It has been estimated that among one million inhabitants of Amsterdam there were on the average in 1959, only 2,000 people seeking work but unplaced. It would be difficult to match this situation in the United States even at high levels of employment.

Initially, an employment counsellor was assigned to the mental hygiene service on a part-time basis. Later, as the service developed and expanded, the same employment counsellor was assigned full time. Although drawing his pay from the employment service he works as an integral part of the post-hospital service. In the interview with him he reported an interesting change in attitude having taken place as his employment conditions changed. During the period of his part-time assignment he reports feelings of frustration and hostility that occurred when he had placed an individual in a job and when that same person—as occurred in many if not most cases—showed up again because he had left his job for some reason he, the counsellor, thought trivial and irresponsible, requesting a new placement and armed with a note from the psychiatrist or nurse requesting such. He explains that he felt that either he was failing in his work or that the psychiatrist or nurse was being "put-upon" by the patient, that they were very gullible not to protest what he considered overusage of services. He came to realize that he was measuring his performance against that of his colleagues who were dealing with a different population. Later, with full time assignment to the service, with increasing contact with personnel of the service and with growing insight, he re-defined his task in terms of different and more therapeutically oriented standards. The objective he now defines is not permanent placement but keeping the patient employed as frequently and as long as possible. This not only has tangible monetary returns and is understandable to the entire community, but is also, in this work-centered society, a highly approved goal. On the other hand, this also means a further involvement of the community in the problem of its mentally ill, not in some socially or geographically distant hospital, but "on the job."

We thus have three elements of the service: medical supervision, housing, and work.

For various reasons, this program, originally designed to facilitate the discharge of patients from hospital, was extended to

those patients in the community who were awaiting hospitalization. Some of these patients had been diagnosed as needing hospitalization. Others were picked up by the service in its effort to screen out admissions that were essentially social problems and that could be dealt with in the community. Still others were referrals from physicians and from the police. This was termed the "pre-care" service. Again the motivations from the extension were clear and communicable and were considered highly desirable on the part of the community.

In the working of this extended service it was found possible to retain many patients who would formerly have been hospitalized in the community, utilizing the same pattern of services as already existed in the "post-care program." The acceptance of these patients meant the assumption of a much greater degree of management responsibility for them. In the post-care program, responsibility is to some extent shared with hospital personnel. In the "pre-care" program the entire responsibility falls on the community psychiatrist. In reality the acceptance of the responsibility appears to have been inevitable. Mental hospitals were crowded. Admissions were often delayed from 10 days to 2 weeks and more. Someone had to assume responsibility for the patients when there simply was no place to hospitalize them. The willingness to assume this responsibility developed out of the success in handling similar psychotic breaks occurring in discharged patients. There was a growing feeling of confidence. "The striking thing," said one psychiatrist, "is not the number of undesirable effects of a psychotic break, but the number of times nothing happens at all." One is struck by what seems, in contrast to American practice, the matter-of-fact way in which the psychiatrist in the Amsterdam service—or perhaps we should say the psychiatrist who survives in the Amsterdam service—handles a psychotic episode in the environment of a tenement or crowded apartment.

There is a final program to be discussed: the emergency service. When responsibility for all psychiatric admissions and for cases awaiting admission was assumed, it was recognized that the service was a 24-hour responsibility, that psychiatric emergencies had to be handled whenever and wherever they occurred. Staff was put on a 24-hour basis so that at any time of the day or night an emergency could be acted on. Interestingly enough all psychiatrists interviewed reported this seemingly onerous part of their duties as an interesting and rewarding one.

Calls are accepted from the police, from physicians in the community, and, under some circumstances, from relatives or neighbors. Since facilities for hospitalization are limited, in almost all cases the psychiatrist on emergency duty attempts a temporary solution, pending the application of the full resources of the service. In well over 70% of the cases the emergency call does *not* result in hospitalization in connection with the episode. In many cases the emergency call concerns a patient already known to the service. It is interesting to notice that through the years the utilization of the emergency service has declined significantly in spite of an increase in the population of Amsterdam. In 1954 there were 1,419 emergency calls. In 1956 there were 411. All psychiatrists interviewed reported in their own clinical experience a lessening of psychotic violence of the sort as to create a psychiatric emergency. Whether this reflects a greater accessibility of psychiatric service or other factors is not clear.

All of this leads to a conception—a theoretic rationale—of social therapy which is generally shared throughout the service. It should be emphasized that this is not a conception which includes the neurotic patient. The general consensus of psychiatric opinion among those working in the service is that the service provides a very unhealthy milieu for the neurotic because it encourages dependency and exploitation. This is, rather, a service designed for those who can exist in the community with a productive amount of social function only if given a certain degree of protection and shelter. The purpose of such a service, according to Querido, "Is to erect a buffer between society and the patient." Within the shadow of this buffer, the patients remain in the community.

There are three elements to this "social therapy." First, there is the acceptance of a long-term management responsibility. This management is directive in nature, concerns

itself with the infinite detail of daily life and frequently acts to protect the patient from the consequences of his own behavior. An illustration of this management is the case of an elderly couple where the wife was psychotic. They had been planning a vacation that was considered most desirable in that it provided the blind diabetic husband with an annual respite. The couple were, however, declining the vacation because they would not take their pet parakeet along and were unable to find someone to care for it. In a matter of seconds the situation was resolved by the nurse-social worker who undertook the responsibility for the parakeet. Needless to say, she also checked supplies of medication, inspected vacation plans, examined the budget and generally assured herself that the planned vacation was feasible.

All this is quite in contrast to our more restricted practice of simply assisting the patient to work out his own problems. The aim here is not cure, but the goal is realistic management in terms of community life. The problem of management was described by a psychiatrist not as one of seeing what the nature of the illness is but "as seeing what the patient does with his illness in the sphere of reality" and, if necessary, mitigating the consequences of his illness so that he can continue to function in the realm of "community reality."

The second element of this conception of social therapy follows logically from the first—direct manipulation of the patients' social environment in order to minimize the consequences of the illness. This is not simply to protect the patient from reality, but also to protect the surrounding group. A psychotic youth may be removed from a household, temporarily or permanently, in order to relieve the parents. Termination of employment in a given situation may be advised. In short, the living of the psychotic is channeled into those areas where there is the least social and emotional cost to himself and to his group. Complaints of neighbors and employers are listened to sympathetically and often acted upon. Repetitions of strained situations are not defined as failures but simply as symptomatic of the need for further manipulation. Lest an erroneous impression be gathered from the discussion of these two elements, it should be emphasized that the average length of stay on the service is about two years. In spite of these dependency creating notions, many patients learn to shift for themselves after a period of time.

The third element of the social therapy many be termed an ideological one. It is perhaps best expressed in sociological terms. The concept of the social institution is central to sociology. The early sociologists, however, had a great deal of trouble distinguishing their concept of "institution" from the popular concept which was that of a physical structure of brick-and-mortar—the orphanage, the hospital, the jail. The concept that the *sociologists* were expressing was one of the "institution" as a set of social practices, routines, patterns of social behavior. According to McIver, an "institution" is a "form of social procedure," in other words, an accepted pattern of behavior. What seems to have happened in Amsterdam is that a pattern of social behavior has been created which provides, for a segment of the population of psychotics, most of the protection usually provided by the brick-and-mortar institution of the popular conception.

The implications of this social institution invite research investigation. A most pressing question concerns the cost, in psychological terms, to the community of maintaining psychotic individuals in close proximity to developing personalities.

What are the implications of the way in which the Amsterdam program grew and developed? It is tempting to generalize and say that programs of community psychiatry are always best built upon the expressed needs of the community. Popular motivations ought, then, always to be accepted and utilized. Under such circumstances, perhaps community involvement to the extent of commitment of necessary resources is more likely. Perhaps these statements are true. But more research is needed before these propositions can be fully accepted.

INTRA AND EXTRAMURAL COMMUNITY PSYCHIATRY[1]

MAXWELL JONES, M.D.[2]

A therapeutic community(1) is distinctive among other comparable treatment centers in the way the institution's total resources, both staff and patients, are self-consciously pooled in furthering treatment. This implies, above all, a change in the usual status of patients. In collaboration with the staff, they now become active participants in the therapy of other patients and in other aspects of the overall hospital work, in contrast to their relatively more passive, recipient role in conventional treatment regimes.

The social structure of a therapeutic community is characteristically different from the more traditional hospital ward. The term implies that the whole community of staff and patients is involved at least partly in treatment and administration. The extent to which this is practicable or desirable will depend on many variables, including the attitude of the leader and the other staff, the type of patients being treated, the sanctions afforded by higher authority, *etc.* The emphasis on free communication in and between both staff and patient groups and on permissive attitudes which encourage free expression of feeling imply a democratic equalitarian, rather than a traditional hierarchical, social organisation.

Staff and patient roles and role relationships are the subject of frequent examination and discussion. This is devised to increase the effectiveness of roles and sharpen the community's perception of them. Thus, it may be felt that a nurse's role is clarified and rendered more effective if she ceases to wear a uniform. It may take many months of study and discussion to decide that, say, a student nurse requires, on an average, 4 months on a ward before she feels secure enough to discard her uniform. To share this discussion with the patients is to increase their awareness of the difficulties of a nursing role and may modify their relationship to the nurses. The aim is to achieve sufficient role flexibility so that the role at any one time reflects the expectations of behavior of both staff and patients collectively.

The examination and clarification of roles inevitably sharpens the role prescription but may at the same time lead to some role blurring. This is not contradictory, as much depends on the nature of the role relationships. Thus, it may seem appropriate that nurses as well as social workers should visit patients' homes. The former might accompany patients on home visits to help in the rehabilitation process to the outside world. The social worker might visit the home with the patient's approval but not in his presence. Her visit might be mainly to try and engage the family members in treatment which would be complementary to the patient's treatment in hospital.

The overall culture in a ward or psychiatric unit represents the accumulation through time of the attitudes, beliefs and behaviour patterns, common to a large part of the unit. This is arrived at as a result of considerable inquiry into the nature of these attitudes, *etc.*, and an attempt is made to modify them to meet the treatment needs of the patients. In this context the term "therapeutic culture" is, sometimes perhaps, hopefully used. The tendency is for these cultural patterns to be most clearly established in the more stable and permanent members of the community, *i.e.*, the staff.

Examples of such attitudes contributing to a therapeutic culture or treatment ideology would be an emphasis on active rehabilitation, as against "custodialism" and segregation; "democratization" in contrast to the old hierarchies and formalities of status differentiation; "permissiveness" in contrast to the stereotyped patterns of communication and behaviour; and "communalism" as opposed to highly specialised therapeutic roles often limited to the doctor.

Hospitalization is only one aspect of treatment, and it is necessary to consider

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the extension of treatment into the outside community. The combined effect of physical treatments, including tranquilizers and social rehabilitation, has been to make many more psychotic patients well enough to return to at least a limited existence in the outside world. The degree of improvement in the remission rate in schizophrenia has not yet been fully assessed, but fairly comprehensive studies have been reported from both sides of the Atlantic. Brown(2) and his associates in London studying post-hospital adjustment in a group of 229 chronic patients found that 68% of these patients succeeded in remaining out of hospital for at least a year, and of these 66% were rated as showing either full or partial social adjustment. Successful outcome was associated with the patients' clinical state on discharge, with their subsequent employment, and with the social group to which they went: patients staying with siblings or in lodgings did better than those staying with parents, with wives, or in large hostels. Freeman and Simmons(3) in America studied psychotics discharged from hospitals and contrasted the outcome of those who returned to conjugal and to parental settings. They found that the wives have higher expectations of performance in relation to the recovered patient than do parents. The tendency to involve families in the treatment and management of their sick members in collaboration with psychiatrists is a current trend in all types of psychiatric illness. The day hospital is one example of this trend, and the much quoted experience at Worthing(4) in England was that during 1957 the anticipated admissions to the parent mental hospital at Graylingwell dropped by 56%, and in the following year by 62% compared with 1956. This means that many patients who in previous years would have presumably been admitted to hospital were now being cared for in the community on an outpatient day care basis.

One effect of this change is to put new kinds of stress on the community. The family are encouraged to keep "Grannie" at home and make do with psychiatric help as required. The general practitioner is more actively involved and by necessity is brought into much closer collaboration with the psychiatrist than previously. The local health authorities have greater calls on their resources, and more extensive training in the psychiatric aspects of their work is becoming necessary for public health nurses and so on.

These changes have come about largely as a response to improved treatment methods in hospitals and a greater awareness of the needs of the patient in social rehabilitation. One could say that these changes have occurred largely within the past 10 years or even less, It is comparatively easy to change the culture of a hospital where the role of the doctor is preeminently that of a leader and the whole culture is or should be geared to therapy. This motivating force is a unifying factor to an extent that is impossible in the much more complex and extensive outside society. Patients have come to feel a new responsibility for their fellow patients and doctors have become interested in their patients as people, but have we any right to assume that the rapid change in the climate of opinion in hospitals will be matched by a correspondingly rapid change in opinion outside?

To start from the beginning, how well are we informed about public opinion in general towards mental illness? The National Opinion Research Center of the University of Chicago have carried out more than 3,500 interviews with a cross-section of American adults since 1950. Shirley Starr (5) reports that only 11% of the sample studied believe that a psychotic cannot get better again. On questions relating to recommending psychiatric facilities, the positive answers were generally better than 50%. When the respondent is asked what mental illness means to him, he generally distinguished between "nervous conditions" and "insanity" and included both as forms of mental illness. In effect, he agrees with the modern psychiatric distinction between psychoses and the personality disorders and includes both as forms of mental illness. In another context, however, when the respondent is not self-consciously giving a definition but is speaking spontaneously, he tends to slip into an identification of mental illness with psychosis only. He does not honor his earlier agreement that personality disorders are part of mental illness too.

Other studies have dealt with the prob-

lem of changing community attitudes towards mental health, but the results of such studies are conflicting(6, 7). It may be that we can, in time, achieve new skills in altering community attitudes towards mental illness, and here lies a whole area for future study. There is a possible analogy with the therapeutic community concept. In the latter, the nurses who once played a largely custodial role now, when personality factors and training permit, play an essentially therapeutic one. How far this pattern can repeat itself, now substituting family members for nurses and treating the patient in the home instead of in hospital, remains to be seen. In these two situations the psychiatrist should theoretically be equally competent. How far is this true in the current European or American scene? How competent is a psychiatrist or a social worker as currently trained to assess the nature and degree of disorganization within a family? To determine who really is the sick member or members? How willing is he either to change his role and operate in the patient's home milieu rather than in his office? The fact would seem to be that as yet there is no adequate training in social psychiatry.

It would seem that the idea of a mental hospital as such is becoming out-of-date. In Britain the new Mental Health Bill does away with the designated hospital and any hospital may now have psychiatric beds where patients may come and go without any formality whatsoever. In addition, commitment procedures which are now invoked in only 13.5%(8) of all admissions to mental hospitals will be still further simplified by requiring two medical certificates only and no legal involvement at all. However, review tribunals are available to any patient who may wish to dispute his commitment and the chairman of this tribunal will be a lawyer. Virtually all mental hospitals in Britain offer outpatient facilities to the areas which they serve,[3] and psychiatric specialists make frequent domiciliary diagnostic visits to the patient in his home; 22,809 such visits were made in 1958. In progressive mental hospitals the medical staff may spend about half their time in hospital and half their time in the extramural services. The hospital is already beginning to feel bypassed and nurses are asking for roles that are more community centered. The center of teaching, psychiatric assessment, and short term treatment is passing to the small diagnostic unit attached to the general hospital.[4] The mental hospitals will probably tend to become long stay annexes and one is presented with the rather tragic anomaly that the very people who have given so much to the progressive aspects of British psychiatry may find themselves relegated to a relatively unimportant role. However, this is probably more a symptom of reaction to change than a reality, and the vitality that produced the change will probably achieve a solution, *e.g.*, the long stay annexes may well become something very different to even our present concept of a mental hospital. Given patients who as a group will, in most cases, be capable of only a marginal adjustment in outside society, if at all, then what sort of social organization should be evolved to give them the optimal social conditions compatible with their mental state? It is possible that something more like a village settlement than a hospital will emerge. Already several mental hospitals have demonstrated the feasibility of employing even disturbed and hallucinated schizophrenic patients on paid production work in a hospital factory doing contract work for outside firms(9, 10). Such a functional role has been shown to improve the social adjustment of such long stay patients and demonstrates that they are capable of working harmoniously with ordinary people(11). At Embreeville State Hospital in Pennsylvania and Mapperley Hospital in Nottingham, England, some long stay patients look after their own wards. In Southern Nigeria, Doctor T. A. Lambo has found that the new mental hospital built by the British is feared by the local inhabitants who view a hospital as a place where people go to die. Not having had mental hospitals in the past, they were unaffected by the custodial excesses which we associate with mental hospitals in the West during the past hundred years. Taking the local village culture into

[3] There are more than 500 psychiatric outpatient clinics for adults in England and Wales.

[4] There are some 43 psychiatric clinics attached to general hospitals in England and Wales (1958).

account he felt that the patients would be happier and get better sooner if they lived in familiar surroundings. He found a village which was prepared to absorb mental patients and their families. This has proved to be so successful that two other village settlements have been started. This experience has much in common with the centuries-old family treatment program in Geel, Belgium. These various examples point the way to social organizations for the treatment of mental patients quite different to the mental hospital as we have conceived it in the past.

In brief, it seems that a social revolution has started in psychiatry, and no one can yet foretell where it will lead us. It seems certain that the mental hospital will change fundamentally. It will probably become much smaller or, as a compromise, the large hospital will break down into several smaller semi-autonomous units(12). The social structure of the future hospital may well change in the direction of more ordinary "village settlements" with their own factories, the maximum possible range of role playing opportunities, and a large degree of self determination. Along with this may well go a radical change in medical and staff roles generally. The center of gravity of psychiatric endeavor may well move from the state hospital to the small assessment teaching and treatment unit in the general hospital, with a concurrent development of much more active community services and greater involvement of the general practitioner and local social service agencies. Titmuss(13) has warned us against over optimism regarding economy when home treatment is compared with hospital treatment. Nor do we know how communities will react to the role for which they are being cast by psychiatric theorists. We need to know much more about community attitudes to mental health and how, if possible, to modify these in ways favorable to the betterment of mental health(14).

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A COMPARISON OF RESULTS OF CONTROLLED DRUG EVALUATIONS IN TWO STATE HOSPITALS

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The need for an effective treatment for the chronically mentally ill continues; and it is fortunate that potentially beneficial compounds are becoming increasingly available. A method of rapidly determining which of these new compounds are of value and which should be discarded is also a continuing need. This report describes such a method of evaluation and a comparison to test the validity of the procedure followed.[4]

MINIMAL REQUIREMENTS IN DRUG EVALUATION STUDIES

If the changes observed during the course of a study are to be attributed to the compound being evaluated, certain significant variables must be considered, and insofar as is practical, controlled. These variables include the selection of a group homogeneous as to duration of hospitalization, characteristic behavior and age. The hospital environment that was in effect before the project was initiated should be continued with a minimal increase in attention, contact with new personnel or other interruption of the patient's previous routine.

In addition to these controls, a standardized method of reporting behavioral change is required. These reports should include detailed observations by trained staff as well as the daily impressions of the ward personnel.

The types of patients to be tested and the personnel available must be considered in selecting a method of reporting behavioral change. For instance, psychological tests which require the patients' participation and sustained interest are of little value in evaluating chronic patients. Involved rating scales with complex instructions may be meaningless to the aide; and the validity of the data collected is hardly increased by the aide's marking his confusion with a 4 plus or a 1 plus.

Unfortunately, there are a great many more psychological tests available for measuring behavioral change than there are psychologists to administer them in most chronic mental hospitals. These psychologists who are available, are not always interested in repeatedly testing large groups of chronic patients.

Whatever system for recording behavioral change is evolved should include observations made by more than one individual at different periods during the day. Since if significant improvement or side effects occur, they should be sustained sufficiently to be obvious to more than one observer.

If groups homogeneous for the factors described are chosen and if a method of measuring improvement or side effects is used which is understandable to the available personnel and capable of reflecting significant change in behavior, then comparable results should be obtained in hospitals with similar patient populations.

The following is a report on the comparison of the results obtained using such a system(1).

METHOD

The following request for a drug study was sent to the psychiatric nurses in charge of the research units in two state hospitals:

Patient Group:
Number: 25 to 35
Duration of hospitalization: 1 year or over
Sex: Male and female
Age: 25 to 65
Diagnosis: Not important but patient should have history of disturbed behavior.
Length of study: 8 weeks
Evaluation: Detailed control evaluation; to be repeated at end of 4th week and 8th week. Weekly progress notes(2).

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Laboratory tests : Complete blood counts and urinalyses weekly.

Compounds to be tested : Stelazine (trifluoperazine) Vontil (N-N-dimethyl-10(3-(1-methyl-4-piperazinyl)-propyl) dimethylanesulfonate)

Side Effects Anticipated : Those seen with phenothiazine derivatives.

Dosage :

Vontil 1 mgm. for 4 weeks, orally
2 mgm. t.i.d. for 4 weeks, orally

Stelazine 2 mgm. t.i.d. for 4 weeks, orally
4 mgm. t.i.d. for 4 weeks, orally

The research staffs of the two hospitals were not aware that the compounds were being run simultaneously. The institutions were located in different areas in the state and there was no direct professional or administrative communication between the two. Figures 1 and 2 show the groups chosen in Hospitals A and B.

The groups were remarkably similar as to average age and duration of hospitalization. The most apparent difference was in the types of patient included; all the patients in Hospital A were diagnosed schizophrenia, while at Hospital B, 5 mentally deficient individuals, a chronic brain syndrome and one manic-depressive reaction were included.

FIGURE 1

HOSPITAL A

Patients : 35 *Female :* 19 *Male :* 16
Age Ranges : 32-63 *Average :* 49.8 years
Years Hospitalized : 5 years or over 30
4 years 2
2 years 1
1 year 2
Average : 17.5
Diagnosis : Schizophrenia

FIGURE 2

HOSPITAL B

Patients : 29 *Female :* 12 *Male :* 17
Age Ranges : 37-68 *Average :* 49.1 years
Years Hospitalized : 5 years or over 23
3 years 3
1 year 3
Average : 17.8
Diagnosis : Schizophrenia 22
Manic-depressive reaction, manic type 1
CBS with psychotic reaction 1
Psychotic, Mentally deficient 4
Mentally deficient 1

MEASURE OF IMPROVEMENT

Indication of a consistent though slight increase in 2 or more of the following was taken as evidence of improvement in both hospitals :

Participation in activities
Socialization
Interest in personal appearance
Appropriate affect and speech
Attention span, alertness
"Feeling better" (patient's statement)
Friendliness
Cooperation
Attempt to communicate

Decrease in :

Agitation
Tension
Incontinence
Overt Hostility

FACTORS INDICATING SIDE EFFECTS

Leukopenia
Facial edema, skin rash
Tremor, loss of associated movements, muscular rigidity
Drooling, mask-like facies or dysphagia
Decrease in motor activity sufficient to interfere with participation in routine activites
Marked hypotension, syncope
Nausea and vomiting
Marked pallor
Increased agitation with depression and somatic complaints

RESULTS

	Drug	*No. of Pts.*	*No. Improved*	*No. Side Effects*
Hosp. A	Vontil	17	5	7
	Stelazine	18	4	10
	Totals	35	9 (25%)	17 (49%)
Hosp. B	Vontil	15	3	5
	Stelazine	14	2	3
	Totals	29	5 (17%)	8 (28%)

DISCUSSION

Hospital A reported improvements occurring in 25% of their group and Hospital B noted improvement in 17%. This discrepancy is attributed to differences in the observations the evaluators considered

significant and in the patients in the groups being tested. Hospital A also reported a higher incidence of side effects.

In view of the proximate results of these trials, it appears that research nurses and ward personnel can observe and record behavioral change in chronic patients with sufficient reliability to carry out drug evaluation studies. It is also apparent that although the two drugs tested are surely an aid in controlling the disturbed chronic patient, the need for more definitive treatment for such groups will require continuing evaluation programs.

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ALTERNATING PSYCHOSES IN TWINS : REPORT OF 4 CASES [1]

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Twins have a peculiar fascination for children and most adults. Burlingham(1) has pointed out that the fantasy of having a twin occurs frequently in childhood. Normal and abnormal aspects of personality development in twins have received widespread interest, partly because twin studies are believed to provide opportunity for separating hereditary and environmental influences on the development of an individual.

Large series of twins with psychotic manifestations have been studied by Kallman (2) and Slater(3) and in these the influence of genetic factors has been emphasized. Psychological patterns have been discussed in smaller numbers of twins by Burlingham (1) and others(4, 5, 6, 7). The successive occurrence of psychoses in twins within a short period of time has been reported(1, 4, 8) but reasons for this have not been advanced.

We were impressed by the interaction between the twins in each pair of our series and have attempted to determine how this interaction has influenced their emotional status and symptomatology.[4]

Four pairs of twins in which a psychotic reaction in one appeared to precipitate a similar reaction in the other were followed. Three pairs were identical, one fraternal. Psychiatric interviews, psychological tests, hospital records, and follow-up reports were used to elucidate this "contagion" of illness. Although the term alternating psychosis refers to a temporal sequence of events, the details of the sequence varied in the 4 cases (Figure 1). The interval between the second twin's learning of the psychotic reaction in the first and the onset of psychosis in the second varied from one day to two months.

Case A.—Helen and Jane were 30-year-old identical twins admitted to the hospital in 1959 with paranoid schizophrenic reactions.

In 1957 Helen's husband began his own business and incurred a loss of income. Although Helen initially opposed this venture, she later appeared to accept the reasons given by her husband for the change. She began, however, to show hypomanic behavior and developed fears of various diseases, mainly gynecological and cardiac. Curettage done in 1958 and again in 1959 showed no abnormalities. In July 1959 she entered a psychiatric hospital for the first time because of marked somatic preoccupation and grandiosity. In the hospital she improved rapidly and was discharged in 3 weeks.

Jane reacted to Helen's hospitalization with apprehension concerning her own sanity and the health of her children. She began accusing her husband of infidelity and robbery and believed she was being poisoned first by her own and then by Helen's husband. She also had a number of somatic symptoms similar to her sister's. Although Jane had always been the more independent and popular while they were growing up, she turned to Helen for support after Helen's return from the hospital. Helen resented this dependency and told Jane of the jealousy she had always felt toward her in the past. Jane responded with anxiety and was admitted to another hospital. She arranged, however, to be transferred to the hospital Helen had recently left and to have the same psychiatrist.

Following Jane's hospitalization, her husband and children went to Helen's home to live. A month later, however, they returned to their own home because of Helen's hostility toward them. After their departure Helen began to fear she was pregnant and became depressed. The day after Jane returned home Helen was readmitted to the hospital. In the hospital Helen talked openly of her anger toward her sister for the latter's dependence on her. With psychotherapy, she gradually

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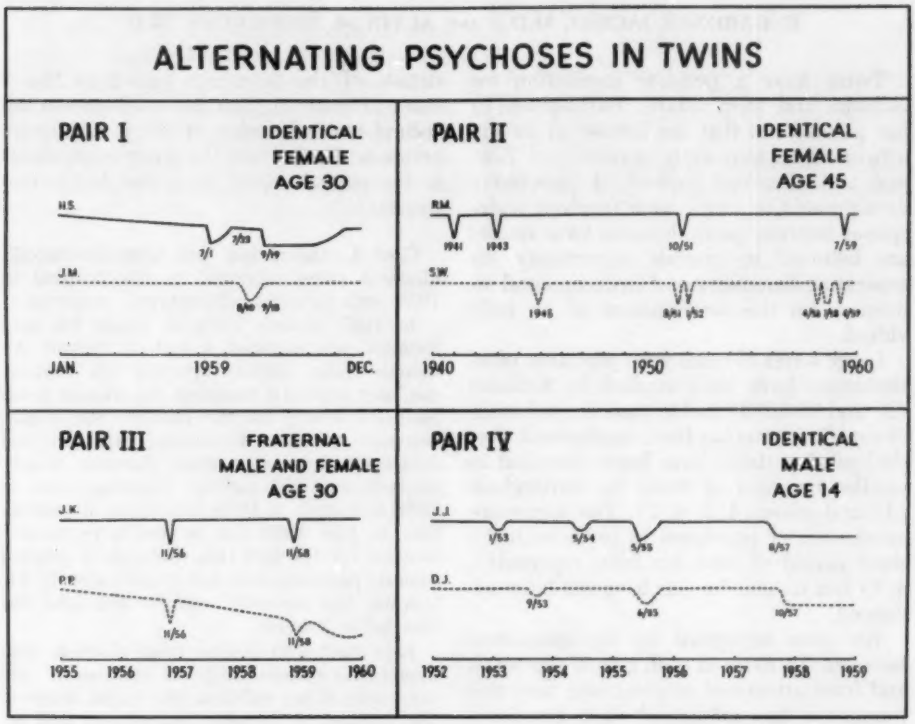
FIGURE 1



improved and was discharged in 3 months.

Of note in the early history is a lack of overt mental illness in the twins despite depression and paranoid thinking in the parents. Jane was voted the most popular girl in her high school class, did well academically, finished nursing school without difficulty, married, and had 4 children before the onset of her psychosis. Her sister, although more quiet and serious, had a similar life pattern. Of interest because of the observations of Leonard (6) is the reported fact that the father was unable to distinguish one from the other until they were adults.

Psychological tests at the hospital compared the two sisters. These tests showed that Helen, from a characterological and descriptive standpoint, used hysterical defenses more than Jane, displayed more free affect, and tended more toward loneliness and depression. Jane was more obsessive and phobic but also more mature and better integrated. She was more perceptive and reality-oriented. She showed greater attachment to Helen than did Helen to her.

During Helen's psychosis, Jane became apprehensive and guilty about her sister's fate. As her thinking became more paranoid and her ability to maintain her equilibrium less adequate, she became more dependent on Helen.

Helen, now feeling stronger and less afraid of her twin sister, expressed the jealous resentment she had long felt. She attempted to reduce and expiate her resulting guilt by caring for Jane's family. Her reaction formation in the form of doing for others was not adequate, however, to conceal and contain her anger, resulting from the dependency demands of Jane's family. She also seemed to be defending herself against a fantasied relationship with Jane's husband. Her anger became more overt than before Jane's psychosis. When Jane's family left her home, Helen responded with guilt and depression.

Case B.—Sarah and Ruby were 45-year-old identical twins. Ruby first became depressed in 1941 following Sarah's marriage and was given outpatient electroshock therapy. Following the birth of Sarah's only child in 1943, Ruby had a psychotic reaction, schizo-affective in type. This reaction led to her initial admission to a psychiatric hospital, where she received insulin coma treatment.

During the next two years Sarah was increasingly preoccupied with the care of her colicky child. She began to complain of a neighbor's attention to her husband, accused her husband of infidelity, and became depressed. She was admitted to a psychiatric hospital and received a course of electro-shock treatments.

In 1950, Sarah's husband had an accident at work resulting in the loss of a leg. She became depressed and paranoid, feeling that Ruby was influencing her son, turning him against her. She was again hospitalized. Ruby became depressed and two months later was herself admitted to another hospital in a depressed state. She had delusions of a religious nature. In 1952, following a brief extra-marital experience, Sarah again became depressed and attempted suicide with poison.

In 1957 Sarah repaid a loan that had been made by Ruby following the accident in 1950. Ruby believed that interest should have been offered and thereafter visited her sister less often than she had before. Sarah became obsessively preoccupied with religion and had some bizarre religious delusions.

When, subsequently, Sarah's husband gave large amounts of money to two sons by his first wife, she felt he was taking advantage of her and developed paranoid thinking. She was taken regularly by Ruby for outpatient psychiatric treatment. In 1959, because of the persistence of her symptoms, she was rehospitalized.

Concurrently, Ruby asked Sarah's psychiatrist if he would accept her as a patient. She began outpatient treatment with him and, after becoming increasingly more depressed, was admitted to the same hospital as her sister. Both sisters improved symptomatically with further ECT and were able to return home, each within two months.

Psychological tests indicated that Ruby was more assertive, aggressive, and obsessive than Sarah, who was more schizoid. Ruby showed deep-seated feelings of rejection and felt her sister had been preferred by their father. Both sisters fantasied that their husbands were unfaithful.

Ruby, normally the more independent and externally oriented of the twins, felt deprived when Sarah developed a family life apart from the twinship. Ruby's independence, like Jane's, appeared to be a pseudo-independence that served to conceal her hostile and jealous but dependent relationship to her twin. Sarah became depressed and paranoid when there was a change in her relationship to her husband. Twice, when Sarah became psychotic, there was a disturbance in Ruby's adaptation and she also became psychotic. Sarah's illness magically "confirmed" for Ruby the danger of her jealousy toward her sister, leading to increased guilt, depression, and finally psychosis.

Case C.—Jean and Paul were 30-year-old fraternal twins. During childhood both tended to be quiet, good students, not active in social, athletic, or other extra-curricular activities. Jean did well in college and became a research chemist. Paul, although of superior intelligence, was unable to obtain satisfactory grades in college and entered the Army, where his 4-year career was unremarkable.

Although married in 1956, Jean continued living in her parents' home. Her husband did not support her. Later that year, following delivery of her first child, she developed a paranoid schizophrenic reaction and was admitted to the hospital. On being informed of her admission, Paul became overtly psychotic, "experienced blinding insight," and "knew" just how his sister felt inside. Subsequently he became progressively more withdrawn and began a gradual downhill course.

Jean quickly recovered and returned to work. A year later, while instituting divorce proceedings against her husband, she again experienced diffuse anxiety and went on a cruise. After being approached sexually by a ship's officer, she expressed fears of an atomic explosion and showed bizarre behavior. She was admitted to the hospital and remained there 6 weeks.

At this time Paul showed an increase in anxiety with confusion in thinking. On a visit to his sister in the hospital, she told him her psychosis was meant to help him by diverting the mother's attention to herself. He concurred in this idea and sought advice from her resident psychiatrist. Paul was found to be vague and disorganized and interested in learning about hospitalization for himself.

As Jean improved and resumed her work

successfully, Paul showed further deterioration in personal habits and in July, 1959, was admitted to the hospital. His hospital course was characterized by passive resistance to treatment, and he showed only slow improvement. He felt his sister's strong interest in helping him and his mother's desire to have him return home were threats to his well-being. To date, he has shown less ability to return to independent living than his sister.

Psychological tests showed these twins to be of superior intelligence. Jean showed more evidence of paranoid thinking, Paul of phobic tendencies. Both utilized denial and showed a tendency to withdraw in the presence of emotional stress.

These twins, although of opposite sex, showed most strikingly a tendency of one twin to "identify" with the other during illness. Paul "knew" how his sister felt inside. Later, although they rationalized that their psychoses served to protect each other from the mother, the underlying hostility in the sister could be detected. She had always felt her brother to be the mother's favorite. Paul's guilt about Jean's illness produced an increase in his anxiety and disorganization and led him to seek advice from Jean's psychiatrist. One twin seeking treatment from the psychiatrist of the other was commonly found in this series.

Case D.—John and David were 14-year-old identical negro twins who were first admitted to the hospital in June 1955. John had an acute paranoid schizophrenic reaction following the accidental death of his dog. David accompanied his twin to the hospital in order to "help him" and was found there to be depressed and concerned with ideas of guilt. He felt responsible for the dog's death and, therefore, for John's illness.

In 1952 John had been referred elsewhere for psychiatric consultation because of soiling. He showed paranoid and depressive symptoms at that time. David began psychotherapy in the same clinic the following year for a depression.

TABLE 1

SYMPTOMS AT ONSET OF PSYCHOSIS

PAIR	DATE	TWIN	
		a	b
I	JUNE-JULY 1959	SOMATIC PREOCCUPATION GRANDIOSITY	ANXIOUS ABOUT ILLNESS OF (a) SOMATIC PREOCCUPATION PARANOID THINKING
	SEPTEMBER 1959	DEPRESSED FEAR OF PREGNANCY	
II	1941	(MARRIED)	DEPRESSED
	1943	(HAD ONLY CHILD)	DEPRESSED, CONFUSED
	1945	PARANOID THINKING	
	AUG-OCT. 1951	PARANOID THINKING DEPRESSED	PARANOID THINKING DEPRESSED
	1952	DEPRESSED	
	1958	SEXUAL PREOCCUPATION DELUSIONAL THINKING	
	1959	DELUSIONAL THINKING	DEPRESSED, FATIGUED
III	OCTOBER 1956	CONFUSED, WITHDRAWN PARANOID THINKING	CONFUSED, DISORGANIZED, PARANOID, GRANDIOSE
	NOVEMBER 1958	OBSESSIVE-COMPULSIVE BEHAVIOR PARANOID THINKING	CONFUSED PARANOID THINKING
IV	MAY-JUNE 1955	PARANOID, WITHDRAWN	DEPRESSED, CONFUSED
	AUG.-OCT. 1957	PARANOID, CONFUSED	PARANOID, GRANDIOSE

Ideas and feelings of sinfulness, guilt, and punishment preoccupied the twins. John was more aggressive and grandiose, had better defined goals and self-concept. David, on the other hand, viewed his role as helper to his twin.

John's psychotic episodes appeared to be more related to outside environmental stresses than his brother's. David's episodes followed threats to his relationship to John or to his dependent tie to the mother, who seemed to favor him. A brief hospitalization of the mother for physical illness two months after John was rehospitalized in August 1957 in a paranoid state led to David's being admitted for the second time with a paranoid psychosis.

A symbiotic relationship was evident in the psychoses. When John became psychotic, David became more dependent on his mother. Although David felt more equal to John when the latter was in an emotionally decompensated state, he also felt guilty and depressed, viewing John's illness as a manifestation of the hostile portion of his ambivalent feelings toward him. The recurrence of psychosis in David tended to restore their previous equilibrium.

John, the more overtly independent, became psychotic after a loss outside the twinship, the death of his dog. David, guilty about his brother's decompensation, tried to undo his guilt by being helpful. This defense failed and he became depressed. When John again became psychotic, David, who had always felt closer to his mother, was able to handle his guilt as long as he could maintain an infantile relationship with her. When she was hospitalized, he lapsed into a psychosis similar to his brother's.

The similarity of symptoms commonly found in these psychotic episodes is to be noted in Table 1.

Discussion

Study of twins provides special opportunities for investigating normal and abnormal personality development as well as the particular problems that result from the fact of being a twin. Twins usually enter a similar environment in infancy although, to be sure, even with identical twins the environment is never truly the same for both. Once parents find ways of distinguishing one twin from the other, the twins can be seen as individuals with separate characteristics as well as one of a pair. Such distinguishing features may lead to different life experiences and influence the development of significant behavioral differences in the twins(7).

Dorothy Burlingham has stated that the needs of twins for each other makes the relationship the closest known tie between two individuals. She discussed the frequent "contagion of feeling" between twins, their identification with each other, tendency to form a working team, reactions to separations, envy and jealousy, and dependence (1).

These features were seen in the adolescent and adult twin pairs of this series. In addition, problems of later maturation could be observed. Difficulties of adult heterosexual adjustment with the emergence of strong sexual and hostile feelings toward other family members and reaction formations against these were prominent. The breakdown of personality organization of one twin with psychosis was followed by a psychotic reaction in the second; and in each pair, the second twin sought help from the physician or hospital treating the first.

In addition to common patterns already noted, the following features appeared in histories of two or more of the pairs: 1. Excessive interdependence in childhood; 2. Distrust of the other twin, the family, or the world at large; 3. Hostile feelings toward the other twin; 4. Similarities of psychotic reactions; 5. Prominence of identification and the use of projection and introjection in handling anxiety.

In this preliminary investigation special attention has been focused on the established interactional patterns of the twins, the disturbances in these patterns, the attempts at compensation in order to maintain a nonpsychotic adaptation, and the failures of these attempts with resulting psychoses. In each pair a change of status of one twin was followed by a change in the other. We have made two hypotheses: first, when alternating psychoses occurred, the psychotic reactions in one twin precipitated and were related psychodynamically to the psychotic reactions in the other; and, second, the psychoses, in the absence of successful compensatory relation-

ships, represent one means for the twins to continue their relationship with each other.

Most frequently, alternating psychoses, as described above, occurred when one twin was experiencing anger toward an important person in his environment, the threat of loss of important persons or objects, or combinations of the two. In the adult pairs, conflict between a twin and her marital partner was often the apparent precipitating event.

Such stresses do not necessarily lead to psychotic states, but stress in the presence of an inadequate ego, a lack of emotional support in the person's environment, or hereditary or constitutional defects may lead to neurotic or to psychotic symptomatology.

Intense rivalries and hostile feelings with attendant distrust appeared commonly and in a number of ways. Disagreements occurred over money between one pair of twins and between one of these and her husband, whom she felt was unfaithful to her. Her accusations occurred after she had terminated a brief extramarital relationship. One twin thought she was being poisoned by her husband and by her twin's husband. The fraternal twins blamed their mother for their psychotic reactions and each believed their psychotic reactions served to protect the other from the mother.

A hierarchy of defense mechanism was used in attempting to defend against hostile feelings. Initially such mechanisms as reaction formation, undoing, or, on a more conscious level, suppression were utilized. When these proved inadequate, other defenses such as denial and displacement and ultimately more pathological mechanisms such as projection and turning against oneself were to be seen. Depression and paranoid thinking occurred commonly as symptoms in the twins during periods of psychosis.

Leonard(6) has shown the importance of identification in twins. Early in life, twins may identify with themselves even more than with the mother; the other twin is always available; the mother cannot be. Later, identification is used as one defense against feelings of rivalry. Identification with the other twin was prominent in each pair of this series; manifestations of this could be observed during illness as well as in health. There was similarity of symptoms, awareness of the feelings of the other, and a desire to act together against parental figures. At that same time, a change in the active-passive relationship of one to the other was a source of anxiety.

The importance and fate of sexual impulses in alternating psychoses is less clear. One of the 14-year-old twins was obsessively preoccupied at the time of his first psychotic reaction with the "shrinking up" of a testicle. In his associations he related this to the mutilation of his pet dog, whose death following an accident appeared to precipitate his first psychosis. Another twin, in the course of a psychotic reaction precipitated by his sister's post-partum psychosis, became anxious about his sexual feelings toward his mother and sister. Another twin's psychosis included thoughts that her husband was unfaithful and that her oldest son might grow up to be a homosexual. Her sister remained free of symptoms while caring for her twin's husband and children but became depressed when they returned to their own home.

The dependency of the twins on each other appeared to be accompanied by feelings of competitiveness, envy, and anger, often intensified when there was a threat of separation. When, for example, one twin required psychiatric treatment, her sister accompanied her each time to the psychiatrist's office. He became aware that the second twin was seeking increasing amounts of his time and would have utilized all the interview time if allowed to do so.

When the dependent relationship was jeopardized by a psychiatric hospitalization of one twin, a depressive reaction often developed in the other. Burlingham has observed that twins suffer acutely when separated from each other. One twin identifies with the other who is missing, taking over his characteristics and in fact trying to be the missing twin(1).

Folie à deux bears certain resemblances to the reactions here described. The similarity of symptoms in close family members and the onset of a psychotic reaction in one following and apparently precipitated by a psychosis in the other are found in both. Psychodynamic features of this syndrome

have been reported by Deutsch(9) and others(5, 10, 11).

Conclusions and Summary

In this series, a psychotic reaction in one twin disturbed the twin relationship. When attempts of the other twin to compensate for this disturbance were not successful, an alternating psychotic reaction developed. Most often the psychoses were of paranoid or depressive type, thus emphasizing the frequent attributing of cause for the illness to the other twin and the acceptance of responsibility by that twin with subsequent guilt and depression.

There was evidence of strong rivalry between the twins during illness as well as during relatively well periods; this rivalry led to a sharing of medical and family care. The second twin was able unconsciously to exact as much help from his environment as the first. The unusually strong identification observed in normal twins appeared to carry over into illness. Ego integrity of one twin may depend on the integrity of the ego of the other.

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INDIVIDUALITY IN RESPONSES OF CHILDREN TO SIMILAR ENVIRONMENTAL SITUATIONS [1]

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Prevalent in psychiatry is the view that the process of socialization in childhood necessarily involves a series of traumata and frustrations. Thus, an influential worker in this field states of weaning that "even under the most favorable circumstances, this stage leaves a residue of a primary sense of evil and doom and of a universal nostalgia for a lost paradise"(6), of toilet-training that "bowel and bladder training has become the most obviously disturbing item of child training in wide circles of our society"(7), and of the response to siblings as involving "jealousy and rivalry . . . now come to a climax in a final contest for a favored position with the mother; the inevitable failure leads to resignation, guilt and anxiety"(8). So pervasive is the influence of this attitude that even an investigator who has himself demonstrated that sucking drive in infancy is at least in part the consequence of opportunities to suck rather than the expression of an innate oral drive states(5), in a recent publication remarks that "the weaning process, except under the most fortunate circumstances, is bound to be frustrating to the child"(14). Such statements involve the assumption that change in established patterns of behavior related to physiologic and social needs of the child is in and of itself frustrating. Thus, toilet-training with a change to the successful use of the toilet bowl rather than the diaper is viewed as a necessarily negative experience. Further, from this point of view the most benign outcome of such a change would be the minimization of trauma. Similarly, more complex parental socialization practices, such as punishment in order to eliminate aggressive behavior in the child is categorized as anxiety-producing with the production of displaced aggression(15).

The view of socialization as a continuous process of frustration has been expressed in its most general form by Freud, in his statement that "civilization is the fruit of the renunciation of instinctual satisfaction"(11). This theoretical attitude derives from the retrospective analysis of individuals experiencing sufficient difficulty in social functioning to lead them to seek psychoanalytic treatment. The view has been extended and further reinforced by the attribution of etiologic significance to difficulties surrounding the socialization process in children who manifest various behavioral disturbances. The alternative proposition that an underlying disorder may have produced both the difficulties in socialization and the later identified behavioral pathology has only recently begun to receive serious attention(1, 3, 10).

The present report seeks to re-examine the question of the effects of important socialization experiences in early childhood on a population of 110 normal children whose development has been followed continuously from the first months of life. It therefore involves an ongoing and anterospective study in which the totality of behaviors preceding, surrounding and following such presumably significant experiences as weaning, toilet-training, the return of the mother to work, and the birth of a younger sibling, are available for analysis. An additional direction of inquiry is made possible by virtue of the prior identification of the children in terms of primary characteristics of reactivity, which have been described in earlier reports(4, 17). These characteristics which can be delineated at two to three months of age in each child and which persist in a stable form as the child grows older, we have called the primary reaction pattern. As yet, no conclusion is

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possible as to whether the patterns are constitutional, environmentally determined, or a combination of both. Knowledge of this patterning permits the exploration of the influence of such initial features of reactivity on the nature of the responses to various socializing forces.

Data on the 110 children now being followed are gathered by: 1. Histories from the parents detailing the behavior of the child in objective, factual terms in the various functional activities of daily life, as well as the sequence of reactions to any special situations. These histories are taken at 3 month intervals for a year, starting at 2-3 months of age, and then at 6 month intervals; 2. Periods of direct observation at one or more points during infancy in most of the children; 3. Direct observation of the child's behavior in a standard play and psychological test situation, done at 3 years of age; 4. Direct observation of the child's behavior in nursery school, and interviews with the teacher as to the details of the child's functioning in school; and 5. A structured interview with each mother and father designed to elicit information on parental attitudes and child-care practices.

The families of our population represent a relatively homogeneous middle-class group, with a majority in various professional occupations. Child-care practices are basically permissive and child-centered, with an emphasis on satisfying the needs and desires of the child.

Details of the methodology, validation of the parental interview technique, and results through the first two years of life have been reported elsewhere(4, 17). In the 3-4 years of life that these children have been followed, a number of specific types of potentially stressful environmental situations have occurred to many of them. The details of the behavior of the children before, during and after the occurrence of these situations, as well as information as to parental attitudes and practices, have been analyzed.

The findings will be presented for each of the various types of situations studied. Since serious questions have been raised about the errors inherent in limiting observation of disturbance to the immediate function that is being influenced(9), in this study in each situation evidence of behavioral disturbance was sought, not only in the area directly involved, for example feeding in the course of weaning, but also in other aspects of functioning, including sleep, toileting and social responses. A second problem, namely the possibility of long delayed manifestations of behavioral disturbance, can only be explored when the children are older.

WEANING AND TOILET-TRAINING

About 40% of the mothers breast-fed their infants with the use of supplementary bottle feedings. In almost all children, the shift to the exclusive use of the bottle was accomplished gradually in the first 2-5 months. In no case was any disturbance in the infant's behavior noted with this change. Weaning from the bottle in all the children was uniformly started by offering the child sips from a cup at mealtime beginning sometime between 5 and 11 months of age. By the end of the third year 60% of the children were completely weaned, with the earliest age being at 12 months. In those children not weaned by 3 years, the bottle was taken primarily at bed and naptime, while the cup was used at mealtime. Most of the mothers of this latter group have been reluctant to make complete weaning an issue, most usually for fear of creating a sleep problem. One-third of those completely weaned accomplished this by 18 months. In many of these cases the weaning was accomplished by the child's spontaneous rejection of the bottle. In some instances the mothers persisted in their efforts to continue with bottle feeding and only stopped when they found their efforts to be of no avail. These attempts of the mothers to delay weaning were due to their fears, which they expressed openly in the interviews with them, that early weaning or toilet training might be traumatic to the child. These fears were based on the presumably authoritative statements they had heard and read as to the dangers of such early weaning and toilet-training. Some of the mothers even confessed to feeling uncomfortable and uneasy at the early weaning accomplished by the child, because they felt their friends would interpret this as evidence of rigid, outdated and harmful child-care practice. In only one case in the first 50 analyzed

has there been some evidence of significant behavioral disturbance associated with the weaning process.

Our data do not support the concept of inevitable psychic trauma inherent in the weaning process. With the permissive approach by the parents, weaning did not appear to be a source of disturbance and under certain circumstances may even have been a positive child-initiated experience. The issue might have been different if there had been rigid insistence on early weaning in the face of resistance by the child. In such situations, the effect on the child may be unfavorable, as it can be whenever the parent-child interaction is antagonistic.

In toilet-training our data are very similar to the findings in weaning. Since all the mothers in this group are permissive and are concerned with the presumed dangers of early training, only 20% started training below one year of age. The median starting age for toilet-training was 16 months. The process was usually a slow one, with the mothers stopping their attempts at training for periods of several months or more if the children objected. In most cases training was completed between 18 and 36 months. In a few children training was not successfully completed until the fourth year.

Toilet-training in the first 50 cases analyzed was accomplished without evidence of disturbance, except in one child. In a number of cases, the children themselves initiated the training, usually in imitation of an older sibling. In this function, as with weaning, the evidence does not support the concept that toilet-training is necessarily a frustrating and traumatic experience.

BIRTH OF A YOUNGER SIBLING

In 18 of the families, a younger sibling has been born since the start of the study. This has provided the opportunity to record the character and intensity of the older child's response to the introduction of an infant into the family. Over half of the 18 children showed disturbance at this event. The two main types of disturbance noted were : 1. Reversion to more infantile patterns of functioning in socialization, sleeping, feeding and toileting ; and 2. Aggressive behavior toward the new baby. In 6 cases the reactions were mild and transient, in one moderate, and in 3 prolonged and severe. Three children showed no discernible disturbance in functioning and 5 actually showed an improvement in their social responses. Thus, children reacted with various degrees of positive and negative behavior to a new sibling.

Both environmental factors and the characteristics of primary reactivity in the individual child appear to contribute to variability of response to new children. The entry of a younger sibling into the family group necessarily affects the amount of time and attention given to the child by the mother and by other members of the household. Where this change in circumstances leads to disturbance in the child, the mother is objectively unable appreciably to modify the situation as she can for weaning or toilet-training. It is of interest, therefore, that the intensity and duration of negative responses were greater in those who were themselves first children than in those who already had older siblings. For the only child the entry of a new baby into the family group seemed to constitute a much greater environmental change. Age at the time of new births also influenced reactions. There was less disturbance in those children who were under 18 months of age when the new sibling was born. A third influential factor was the degree of prior paternal involvement. In several children whose fathers had been especially active in caring for them and whose fathers continued to do so even after the arrival of the new baby, the turning of the mother's attention to the younger sibling was not an especially disturbing event. In one family where both parents were very much involved with the first child, there was no reaction when the mother took care of the new baby, but the child, a boy in his third year, developed stuttering as soon as the father began to handle the baby. As soon as the father stopped this and devoted himself again to the older child, the stuttering stopped.

On the organismic side, qualitative analysis of the data has shown a definite relationship between the characteristics of primary reactivity in the child and the type of response to the birth of a sibling. Those children who from early infancy on showed mild, positive regular responses with quick adapt-

ability to new stimuli, such as the bath, change in sleep schedule and the introduction of new foods, manifested a similar pattern with the new baby. In this group, disturbances were minimal or non-existent. On the other hand, those children characterized by intense, negative and irregular responses with slow adaptability tended to show greater and more prolonged disturbances after the birth of a sibling.

MOTHER'S RETURN TO WORK

Six of the mothers returned to full-time professional work when the child was 2-3 months old. There was intense, prolonged disturbance in one child and none observable in the other 5. The child who was upset had intense, irregular, negative and non-adaptive responses as the over-all primary pattern. The other 5 who are now all in the fourth year of life, have shown no significant disturbance in functioning. The primary reaction patterns of these children have been of the regular, mild, positive and adaptive type.

PARENTAL PRACTICES AND ATTITUDES

A quantitative analysis of our data has confirmed other studies(2, 12, 13, 16), indicating a lack of any one-to-one correlation between any specific parental practice and its effectiveness. In our child-centered families the mothers have most usually tried to meet the child's demands, and where this has not been possible have tried to alter the stimulus or the situation rather than insist on the child's alteration of a negative response. In spite of parental similarities of approach, the responses of the different children in the areas of sleep, feeding, toilet-training and social restraint have shown wide variation. Preliminary impressions, which await confirmation by a fuller analysis now in progress, are that this variability in responsiveness may be related both to the primary pattern of the individual child and to the over-all attitudes of the parents.

It also appears that while the parental attitudes do play a very important role in influencing the child's development, the direction of this influence is significantly affected by the child's primary reaction pattern. For example, several mothers have been pressuring and domineering in their approach. In two cases, the children have developed strong negativistic trends, but in a third case it is significant that the child has become acquiescent to his mother's demands and even submissive. The first two children have intense, negative and non-adaptive primary reactive characteristics, whereas the third is mild, positive and adaptive.

It has also been of great interest to observe the progressive crystallization of specific parental attitudes related to the primary reactive characteristics of the child. Where the child's primary pattern has made his care easy, the mother has often shown a much quicker and more intense development of positive attitudes than in those cases in which the child's primary reactions have made his care more difficult and time-consuming. This influence of the child on the parent has been most dramatically evident in two families where there are twins who showed differences in patterning of reactivity from early infancy on. In each family, the mother, who started with the same attitude toward the two infants, has developed increasingly dissimilar responses to them as they have grown older. In large part, these attitudes are based on her reaction to their primary differences. In 3 other families with twins with similar patterning each to the other, this differentiation of parental attitude has not been evident.

OTHER SPECIAL EVENTS

Five children were hospitalized during the first two years of life for various illnesses and operative procedures. The mothers stayed at the hospital with the child either for part or all of each day. No significant disturbance related to the hospitalization was evident in three children after the return home. In one child there was a moderate reaction which appeared related to the limitations imposed by a hip cast. Only in one child was there marked disturbance. In this case the mother was very pressuring, overprotective and at the same time hostile to the child, and during the one week period of hospitalization literally insisted on staying with her day and night.

Ten children have had to wear an orthopedic foot bar at night for several months

or more during the first year of life. After the initial period of adaptation, which took several days to two weeks, no persistent disturbance in reaction to this restraint developed, except in the same child mentioned above with severe reaction to hospitalization.

Separation or divorce of the parents has occurred in 4 families, in each case before the child was 2 years of age. No significant acute disturbance has occurred in any of these children, though, of course, no prediction can be made as to any long-term effects.

Discussion and Conclusions

The above data indicate that the character of the response of a young child to specific situations or to the over-all attitude of the parent is the result of the interplay between environmental factors and the primary reaction pattern. With certain events, such as weaning and toilet-training, the parent can guide and modify the approach in accordance with the reactions of the individual child so that disturbance is kept to a minimum. With the birth of a younger sibling, where the parent does not have this degree of control over the situation, the possibility of disturbance is much greater. The influence of the child's primary reaction pattern is more obvious in the marked variability of response of different children to this event.

On the other hand, the data do not support the concept that weaning and toilet-training are necessarily traumatic, an assumption usually based on the hypothesis that these events cause frustration of libidinous drives. Such frustration, and such fixed drive states are not evident in the behavior of the various children in this study. This is especially highlighted by the number of cases in which the child, instead of clinging to such presumed instinctual gratifications, initiated weaning or toilet-training himself over the mother's resistance.

Further, our data do not support the prevalent idea that the process of socialization in the young child necessarily involves a sequence of frustrating and traumatic events. This concept is based on the assumption that it must always be a negative experience for the child to give up an activity such as sucking which is associated with the gratification of a biological need, or to lose a part of the mother's time and attention if she returns to work or a younger sibling enters the family, or to change initial patterns of activity as the result of training, such as in bladder and bowel evacuation. The learning of the many social restraints necessary for the child's safety, for the recognition of the needs of others, and for the prevention of damage to household objects, is also considered to involve primarily the frustration of the child's own drives. Absent from these various formulations is the concept that the processes involved in socialization may have very important positive aspects for the child. The learning of a new activity, the mastery of a function such as sphincter control, the stimulus for changes in behavioral patterns provided by the identification with and desire to imitate a parent or older sibling may have important positive effects on the growing child.

The wide variations in response to similar environmental situations occurring during the process of socialization shown by the children in this study indicates that it is impossible to make any generalization as to the effect of such events that will be valid for all children. Every experience is an individualized one for each child and its psychological influence can be understood only in terms of the environmental context in which it occurs and of the primary characteristics of reactivity of the child.

Finally, it is important for parents to know that their basic activities with the infant, such as weaning, toilet-training, and the teaching of various restraints and prohibitions, are not necessarily traumatic and frustrating to the child, and may even be positive experiences. The same is true of events which result in the diminution of the mother's time devoted to that particular child, as with the birth of a younger sibling. Prevalent psychiatric attitudes have led innumerable mothers to feel apprehensive as to the potentially harmful effects of these activities and events on the child, so that the normal processes of child-care take on the aspect of a hazardous and treacherous project(2). This apprehension was graphi-

cally demonstrated by the mothers in our study population who resisted the child's spontaneous demand to be weaned early, for fear of its consequences. The reassurance that the normal processes of socialization are not necessarily fraught with all kinds of psychological dangers for the child has proven very helpful to these mothers, and can, with profit, be extended to all those who have suffered from the influence of incorrect theory.

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DISCUSSION OF TWO PAPERS [1]

F. J. KALLMANN, M.D.

Since several papers presented at this meeting conveyed an intriguing object lesson in the versatility of the twin study method or, more specifically, of the many investigators now using it, I appreciate this opportunity to comment on them *en bloc*. A definite advantage of this arrangement is that instead of being forced in my brief remarks to harp on the obvious procedural and interpretative limitations of psychiatric twin studies, I can place the emphasis on their matchless potentialities. To make the most of them, however, twin study projects call for a representative series of twins, amenable to the employment of appropriate statistical techniques. The statistics describing such a sample are computed from twin index cases rather than nonrandomly collected twin pairs.

Twins in general have long been known to be fascinating research subjects, irrespective of the fact that they offer unique opportunities for combined cross-sectional and longitudinal studies in a family setting. However, single observations on twins are rarely significant in themselves nor are twin data as such less defenseless against abuse than any other set of statistics. To paraphrase recent comments by Morison and Li, facts about twins do not give us a direct sense of cause and effect, nor are twins as a research species so uniquely unique that they defy any attempt at statistical treatment.

Whatever may be said about statistics generally, it cannot be doubted that reliance on statistical techniques will go a long way towards helping a psychiatric twin research worker, as much as it does any other investigator in the behavioral sciences, fo detach himself from an intuitive sense of his material. In other words, in order to have a better understanding of the complex etiology of disordered behavior patterns, contemporary psychiatry needs scientifically validated facts more urgently than a great number of casuistic observations which seem somehow compatible with a neat hypothesis.

To avoid possible misunderstanding, I hasten to say a few special words of praise for one of the papers to be discussed by me, that of Dr. Chess and her co-workers on the variability of the young child's response to similar environmental situations and, in turn, the progressive crystallization of specific maternal attitudes in response to the primary reaction pattern of the child. While the emphasis of this carefully conducted study has been on single-born children, it is certainly of interest, and in agreement with many other observations, that in families with twins who showed dissimilarity in behavioral patterning from early infancy on, there was a substantial difference in the effect exerted by the children on the mother. By the same token, it was to be expected, that no comparable differentiation of maternal attitudes could be observed in the families of twins who were similar in their primary reaction patterns.

For a longitudinal record of these twin histories it would of course be helpful to have all essential zygosity data specified in detail. The same stipulation applies to the findings in the other twin studies presented in this section. The given observations are based on a combined total of seven pairs of twins with an assortment of at least eight different forms of psychiatric disorder. The age range of the twins was from 12 to 45 years, and one of the pairs was of opposite sex and therefore dizygotic.

Regarding the rather vague reference to our finding of a higher schizophrenia risk figure for two-egg twin partners than for "non-twin siblings," it should be pointed out that the risk difference between full siblings and all dizygotic cotwins extended from 14.2 to 14.5 per cent in the 1953 material cited, and from 14.3 to 14.7 per cent

[1] Two papers presented at the annual meeting of The American Psychiatric Association in Atlantic City on May 10, 1960: 1. Stella Chess, Alexander Thomas, and Herbert Birch: *Individuality in Responses of Children to Similar Environmental Situations*; and 2. E. Gardner Jacobs, and Alvin M. Mesnikoff: *Alternating Psychoses in Twins: Report of Four Cases.*

in an earlier analysis published in 1946. What has not been mentioned by Dr. Jacobs and Dr. Mesnikoff is that in the same families, the morbidity risk of the step-sibs and half-sibs of schizophrenic twin index cases varied from 1.8 to 7.0 per cent. At any rate, it should not be inferred that the genetic theory of schizophrenia depends only on the interpretation of concordant twin data.

Another aspect to be considered is that in our original sample of 691 schizophrenic twin index families, simultaneous occurrence of schizophrenic symptoms was observed in only 17.6 per cent of one-egg twin pairs. In about one-half of this consecutive series of pairs—52.9 per cent, to be exact—there was a difference in disease onset of one month to four years, while in over one-quarter the difference observed was from four to twelve years. Significant dissimilarities in symptomatology were seen especially in twin partners with a definite disparity in age of onset.

Even more striking was the finding that similarity and dissimilarity in environmental constellations were almost equally distributed in the series of discordant pairs. More specifically, 49.3 per cent of two-egg cotwins remained free of schizophrenia although they had shared the same environment with a schizophrenic twin; and approximately one-quarter of one-egg pairs (22.4%) became concordant without similar environment. A more recent twin study of preadolescent forms of schizophrenia confirmed the nonexistence of a simple correlation between inadequacy of the parental home and an early onset of a schizophrenic psychosis.

The last point to be covered may be a matter of semantics to some people, but it happens to be a pet peeve of mine of rather long standing. It concerns the introduction of still another synonym—the phrase "alternating psychoses"—for one of the clearly anachronistic expressions of modern psychiatry: *folie à deux*, variously referred to as induced insanity or psychosis of association.

Originally used by Lasègue and Fabret in 1877 to describe the transference of delusional ideas from a psychotic individual to an intimate and submissive associate, replacing such older terms as infectious insanity and psychic contagion, the concept of *folie à deux* was later stretched so far as to be applied to the coexistence of any mental disorders of a similar variety in two or more persons who seemed closely enough associated. For example, the term was frequently employed either to describe or to explain similar schizophrenic or depressive symptoms in twin partners or two other members of a family unit. Equivalent diagnostic labels used were collective, contagious, simultaneous, reciprocal or double insanity; mystic paranoia; and induced, influenced, imposed, communicated or associated psychosis. In this manner, and subtly reinforced by the equally ineradicable belief in the inheritance of acquired characteristics, the concept of *folie à deux* helped to perpetuate the notion of a magic phenomenon producing mental disease through personal contact.

Many years ago (1946), for the sake of creating a more objective attitude toward the phenomena and techniques of psychiatric genetics, I suggested limiting the term *folie à deux* to the transference of circumscribed delusions between closely associated but unrelated persons. With our present knowledge still far from enabling us—with or without intuition—to separate the interacting effects of genetic and nongenetic elements in the etiology of behavior disorders in consanguineous settings, my original suggestion still holds in 1960. If an unbalanced chromosome complement due to non-disjunction of chromosome 21 occurs more frequently in the child of an older woman than in that of a younger one, a conceptual preference for alluding to the mother's age as a sociopathic factor will be of very limited value in understanding the etiology of mongolism. In such instances, time alone will be able to determine the validity of a tentative hypothesis, however attractive or appealing it may have been at the time when it was formulated.

May I conclude my comments with a word of thanks to the various sets of investigators who contributed to this interesting session. All reports were thought-provoking and, therefore, of definite merit.

BEHAVIORAL CATEGORIES OF CHILDHOOD [1]

J. FRANKLIN ROBINSON, M.D., LOUIS J. VITALE, M.D., AND CARL J. NITSCHE [2]

A group of descriptively delineated behavioral categories of children is presented for critical review. We are interested in ascertaining whether other professional workers will recognize these behavioral patterns. The patterns are presented tentatively as they have appeared in clinical practice with children rather than as a final formulation.

Fear or anxiety is an inherent reaction to a new and important situation, and personality is patterned to a significant degree by the manner in which an individual responds to these feelings. As a child is introduced into a treatment situation, he will be apprehensive, and we have been accustomed to describing the manner in which he attempts to handle himself as fear or anxiety is aroused. Such reactive patterns are confirmed as the therapist becomes intimately acquainted with the child and constitute the framework in which the child's behavior is examined. The patterns are surprisingly consistent for a given child.

Some years ago, we reviewed a large number of case records and listed the behavioral patterns which were described. With usage, the following categories became easily recognized: 1. Active Superficial (including children with circumscribed interest patterns), 2. Openly Antagonistic (actively antagonistic), 3. Active Control, 4. Passive Control, 5. Passive Apprehensive.

These categories do not correspond with classical nosological groupings, but can be recognized as patterned tendencies within the group of transient situational reactions, psychoneuroses, personality or character disorders, the organic and intellectual defect states, and the normal child.

We are not convinced of the inclusiveness of the categories and would entertain suggestions for additions or alteration of the groupings. They have had considerable use within the program of the Children's Service Center, and we urge your consideration of them.

A category might be viewed as a pattern of defense. The positive aspect of a defense reaction is that it is a way the individual has discovered of responding in certain circumstances. Such patterned responses become characteristic for each child. On occasion, a child may react with a variety of the responses listed, and indeed with other defenses, but it is our impression that there is a tendency to follow certain patterns in a repetitive manner. The categories have singled out a feature of the accustomed responses of the child, which dominates his reactive patterns. We have concluded that children do not from time to time alter their responses to utilize extensively a variety of the categorical patterns.

Activity refers to the manner of a child's approach to interpersonal relationships rather than to the quantity of motor discharge. In the active group, the child directs his actions with a secondary concern for the response of the other individual. The passive child does not initiate issues, but responds in his accustomed manner as he is required by the activity of the other person.

The *actively superficial* child presents an apparent shallowness in emotional response and is difficult to engage in meaningful discussion of his attitudes and emotions. He may converse on impersonal topics, but is not essentially concerned with communication and is evasive or disinterested when attempts are made to discuss his personal feelings. Such moves are countered or anticipated with self-centered activities or talk.

There is a tendency to deny the existence of troubled feeling or of behavioral difficulty. The child expresses positive or pleasant feelings, but does not reveal negative, hostile, or openly aggressive feeling. He is superficially conforming, ready to please

[1] Read at the 116th annual meeting of The American Psychiatric Association, Atlantic City, N. J., May 9-13, 1960.

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or be obliging, and unwilling to invoke displeasure.

There may be an air of self-satisfaction. Such children may be popular because they do not offend or challenge. They, however, avoid close friendships.

The following case illustrates this category:

Case 1.—Boy, age 10 years. A good looking, likeable boy, John adjusted to camp readily. Although he played games and joined in activities, he was never part of the group. His relationships were superficial with the children and staff. He was not truthful and admitted little or no responsibility for stealing or leaving camp grounds without permission. John always had a story to cover his actions. If he had stolen money, he would say that his father had sent it to him. John did not talk freely of his parents and did not write to them, although he always looked for mail.

The *actively antagonistic* child is perhaps more aptly termed openly antagonistic. He is hostile, negative or defiant in his approach to people and situations. He does not conform and stirs rebellion in others. His fear may be obvious, but is denied, even when he is aware of it. Such children may engage in antisocial acts and constitute one group of delinquents.

He challenges and invites others into struggle. He denies personal problems, and projects the difficulty onto others. He seems to fight against a friendly approach to him. He has a need to oppose and is ever ready to defend himself or attack when he is threatened. He cannot relate easily at a positive level.

Case 2. (Excerpt from an initial interview.) —Boy, age 5 years. "Mrs. Depew is going to bring her nice little boy down here and I will have a fine time. Her boy fights." I say that I thought Andy was the one who fights. He says, "My name is Andrew. Do you mean me?"

"I'll tell you something about Dexter Depew. The kids in school call him 'Stinky,' and next week I am going to wear something and scare you—my cowboy suit." He continues, "Hey, do you want me to come down here any more?" I say that I thought he came down here because he had a job to do. He continues, "I'll beat you up. I can be anywhere I want to."

One notes the manner in which this boy meets a new situation with an habitually aggressive response.

Control is a practice of limiting or prohibiting the activity of the other person, so that one is not called on to respond in a manner determined for him. If you allow another person freedom of action, you must react to his directional moves. The controlling patient avoids challenge and the accompanying fear or anxiety by keeping matters in his own terms and restricting the initiative of those who would associate with him. Such control of the behavior of another person is distinguished from so called self-control.

The *actively controlling* child attempts to dominate and direct those about him so that fear will not be aroused. He is demanding of others, but is himself dissatisfied. He does not accept limits. He becomes querulous or petulant, when compelled to attend or respond. He is disturbing in a group, because of his persistent drive to compel others to respond to his demands. He will act in a group only on his own terms. The important distinguishing feature is the active determining influence in the group or in a personal relationship.

The following case excerpt is illustrative.

Case 3.—Boy, age 8 years. "Don't call me Morton, call me John." He doesn't like Morton. He makes people call him John. When I open a window, he says, "Don't open the window; it is too cold." Then he looks at the chairs and says, "Oh, if I sit on one of those chairs, I'll bust it. Yes, I'll bust it. I'll cave those chairs through, once I sit on them." I say that I imagine they are strong enough to hold him, but I suppose he feels a little frightened about using those chairs. He says, "I have to sit down, but I'm not going to."

One notes the manner in which this boy dictates that he be called by a name other than his own. He does not allow the therapist to open a window, and expresses his reluctance to participate freely, even to the extent of using a chair.

Passive control is sometimes more difficult to distinguish, but becomes apparent when the child's behavior is examined over an extended period. Such children initially

may appear to be emotionally unresponsive, but do persistently influence the activities of the therapist or those about them. They differ from the active superficial group in that they are not ready to conform or be obliging. They are not deterred by the displeasure of others. They differ from the active control group in their reluctance to express evident antagonism. While passive, they are not neutral in a relationship, and do control and influence the behavior of those about them.

There is little overt indication of emotional turmoil or concern. They appear to lack initiative or spontaneity. Discussion of personal feeling is avoided. Verbal contact is at a minimum and they may hold to periods of silence or inactivity. One may gain an impression of an emotional defect because of the unresponsiveness and the child's inability to communicate.

Case 4.—Girl, age 10 years. She doesn't feel very good about herself, therefore, she should change her habits. She says that she tears her clothes. "I don't say I am mad, I just do it." I say, "Tearing your clothes is the way you tell people you are angry." She says, "That's the way I do it; I don't say it. I keep what I feel right inside." She says, "I only think it inside; I don't seem to say it." I say, "That sounds different from tearing clothes, that sounds like trouble in really getting some of these feelings out." She continues, "I guess that's my part. I talk back in one way—sometimes it's like talking back. Mommy says to do something, I don't say I won't. I do in some way say I won't. She'll say there were 14 girls, I'll say there were 12. Then she'll think it over and say there were 12, and I'll keep on saying there were 14. I'll say I want it that way. I think I'm right and I get mad."

The *passive apprehensive* group is easy to recognize. The fear or apprehension is evident to the patient and to others. The child is reluctant to express antagonism and to act spontaneously or demonstrate initiative. He expresses his apprehension readily and openly. He differs from the passively controlling in that he conforms and follows directions. He is not an effective influence in the group, and usually prefers younger associates.

The passively apprehensive child is distinguished from the passively controlling child most readily because of his evident emotional distress. His fear is diffuse and easily discerned by the therapist. He appears helpless and cries easily when challenged. He may be aware of his fear and unable to act decisively. He asks for direction from the therapist, but his response is passive and uncertain.

Case 5.—Boy, age 8 years. Then he turns to me and says, "They haven't gone yet. If they have, I don't know what I'll do. I'll be scared." I say, "Maybe you feel scared just being here." He asks me if I know the way to his home. I say that I think he will get home all right. He says he's not going to stay here. "When am I going down?" Then he cries and says, "I'm going downstairs." I ask him why he has come—that children usually come here to get something done. He says, "I'm not going to do anything. I feel like crying." He starts to cry and says he wants to go home.

The categories are useful in communication among clinical staff members. In collaborative work, with a number of professional workers involved in the efforts to help the child, unity of effort is important. The categories offer a ready means of stating certain features of a child's reaction pattern in a more organized manner than listing of symptomatic behavior, and in a manner not yet committed to an assumption or speculation about the psychodynamic organization of the child. The emphasis is directed away from the behavioral symptoms to the nature of the child's efforts to react to his emotions.

The categories are also helpful in defining with the parents the nature of the child's difficulty. Effective work with a parent calls for some accord between the psychiatrist or clinical team and the parent in the formulation of the child's problems. This must be reached in terms which are comprehensible and meaningful to the parent, and which center attention on the emotional aspects of the difficulty (*e.g.* the child's fear, and his efforts to handle it) rather than the troublesome behavior itself.

An openly antagonistic child can be seen as one attempting to act in the face of fear, rather than as primarily hostile or antagonistic to his parents, his friends, his teachers, *etc.* The emphasis is on his underlying

apprehensiveness and uncertainty, rather than his overtly aggressive behavior, which may indeed be reinforced when one reacts to it in kind. The controlling child can be seen as protecting himself rather than being determined to direct and compel the affairs of those with whom he associates. Such an early declaration of the psychological aspects of the child's behavior enables a more constructive initial approach to the understanding of the child, and does not preclude an altered or more thorough understanding of the child's motives and patterned reactions, as work progresses.

If the patterns outlined in the categories can be recognized by other workers, they would be valuable in statistical or research studies. At this point, their chief value will be as a stimulus towards the delineation of groupings, which are applicable in childhood. We have a long road to travel to arrive at a useful classification of childhood disorders. Many of the suggestions that will be proposed will be discarded, but we cannot longer delay efforts to find nosological groupings which incorporate the features of the common disorders of childhood. Especially in the situational reactions, psychoneuroses, personality and character disorders, a refinement of classification is needed with the aim of reaching groupings which have a common acceptance throughout the children's field. The task will not be accomplished by either a single or isolated group of workers. At this point, suggestions for new approaches should be encouraged, as well as critically examined.

The delineation of a syndrome, in which certain psychological features are emphasized, may lead to the recognition of a characteristic developmental or life history. This is illustrated in the manner in which we have developed an increasing understanding of the group of children designated as having circumscribed interest patterns(1).

These children were seen initially as a group who had done well in treatment and who demonstrated withdrawal of a lesser degree than was encountered in early infantile autism, but who had restricted favored interests or activities. They were not psychotic and the benignancy of the condition was indicated by the relative absence of bizarreness and the usefulness or comprehensiveness of the circumscribed interests or activities.

We recognized shortly that all of such children fell within the category of the actively superficial. Indeed, it was the superficial aloofness which initially concerned the parents. The aloofness was evident in the pre-school years when the child had his earliest opportunities for group experience.

With the development of the special interests, parents were encouraged, and hoped that the children were becoming involved in the activities of those about them. The superficiality or partial withdrawal was maintained. The children socialized to a limited degree. Teachers were troubled about the children when they failed to participate in classroom activities. It was usually through discussions with teachers (school and Sabbath school) and recreational leaders that the parents developed a second period of concern about the child. Referrals were accordingly made between the ages of 8 to 12 years with surprisingly few referrals at earlier ages.

A recognition of these features of the child's psychological make-up and development led to the observation that many of the parents had themselves a superficial or aloof quality. The nature of the child's interests seldom followed those of the parents. Perhaps a reluctance for emotional involvement was necessary to enable an evident social deviation in a child to continue over a number of years. In any event, it has become evident that work with most of the parents of such children calls for a real measure of certainty and direction in the early stages.

We do not know that each of the categories described predisposes toward a certain type of developmental life history. If this were so, the categories would indeed be useful, if empirical, groupings. We are suggesting that a search for syndromal groupings of psychological and behavioral characteristics may be one of the steps which will lead to a useful classification of childhood disorders.

Conclusions

1. Five descriptive categories of behavior in childhood have been outlined.

2. These categories have proven useful in intra-staff communication, and in the organization of work with parents.

3. These or other groupings of symptoms or behavioral features may lead to the recognition of clinical conditions, which can achieve general recognition or acceptance leading toward a practical classification of childhood disorders.

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RESULTS OF MENTAL HOSPITAL TREATMENT OF TROUBLED YOUTH [1]

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In the study and treatment of troubled youth who have come to the attention of society and its service agencies during the years since World War II, we have selected to review the life histories of 100 young males between the ages of 14 and 19 admitted to The New York Hospital, Westchester Division over a period of 10 years. They represent the consecutive admissions of this age group from 1946 to 1956. The hospital has been called upon to share the responsibility of studying, treating and attempting to restore these young people to a productive and satisfying place in life. Their difficulties have grown more severe as time goes by and the schools and courts have been most cooperative in the arrangements for admission and the treatment and rehabilitation of these young people. This is the first of many studies by the entire medical staff and personnel of the hospital. The aim of this research is to acquire an increased understanding of the problem as it relates to the individual patient, his family, the home, schools, and social environments to which he is restored. Through this understanding, improved methods of management and treatment are being developed.

The average age of this group at the time of admission was 17. Most of them came from small family units : 19 were only children, 30 had only one other sibling. Sixty-three or almost two-thirds were first male children in the family. The pressure to succeed was extraordinary and a source of paralyzing anxiety to many. The families were generally well-to-do with better than average educational and cultural opportunities. There were 50 Protestants, 28 Jewish, and 22 Roman Catholics. There were 54 who showed psychotic reactions in the family history. Twenty-five had parents who were hospitalized for psychoses. These patients were impressed by the disturbance created in the home and by the separation from the parent. There were only 10 from homes broken by divorce, separation, or death of one of the parents, but over 90% showed a lack of harmony between the parents. The father frequently failed to set a healthy example for identification and in exerting firm leadership. Fathers being away in military service during the infancy and early childhood was most traumatic. While the father was away the mother commonly went to live with her parents and the early home environment was predominantly female. Upon returning from war service where masculine virtues were emphasized, the fathers often gained the impression that their sons were spoiled and effeminate. They tended to enforce a Spartan discipline, sometimes of a cruel nature. Such fathers had not developed any real relationship with their sons. Many commented that they had never felt close to their child ; some even doubted the child's paternity. Patients growing up in this situation felt rejected and reacted with a variety of psychopathological patterns depending on their temperament. Feminine identification with exaggerated passive dependent needs was a frequent finding. Upon reaching adolescence this was the source of great conflict. Hostile, rebellious, and even delinquent behavior was often displayed in an attempt to compensate for doubts concerning their masculinity.

Of significant importance was a type of mother who was immature, indulgent and even seductive in her attitude toward the patient. This was manifested in two-thirds of the mothers by prolonging infantile dependence and by too much fondling. Some mothers undressed and bathed before their adolescent sons ; others permitted their sons to sleep with them. These mothers and sons were often conscious of the sexual excitement induced. The psychotic symptoms precipitating the hospitalization of many pa-

[1] Read at the 116th annual meeting of The American Psychiatric Association, Atlantic City, N. J., May 9-13, 1960.

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tients were alternating periods of hostility and erotic advances towards the mothers. Five of these mothers, conscious of their own incestuous feelings, became psychotic and required hospital treatment.

Infancy and early childhood were commonly marked by serious physical difficulties including birth injuries, repeated upper respiratory infections, allergies, feeding problems and operations. These appeared to interfere with normal physical growth and to retard the development of normal healthy relationships with members of the family and playmates. Over 75% were shy, isolated, poorly coordinated and lacking in strong spontaneous feelings. The group as a whole found it difficult to invest interest in their surroundings, school work and group activities.

Although their school work was average in 75%, they were not up to the family standard and felt inferior to other members of the family and classmates. One third of the group had Intelligence Quotients ranging between 90 and 100 while parents and siblings were within the superior intellectual range. Discouragement at their relatively unsuccessful school work was associated with a lack of application, falling behind, and dislike for school. Twenty-five per cent were above average and were compulsive and perfectionistic about their school work. The latter did better in responding to hospital treatment and a greater proportion of these patients recovered.

There was noticeable unevenness in personality development. Being isolated, they did not feel secure in the family group or at school. Over-compensation in preoccupation with unhealthy and impractical intellectual activities along with philosophical, religious and mystical ruminations was common. Many became absorbed in solitary hobbies. Failure in emotional maturing and socialization led to increased withdrawal and a tendency to act out aggressively against parents, teachers and less commonly playmates.

The following case illustrates these points :

John, whose mother became psychotic after his admission and required hospitalization, was born while his father was in the armed services. He had been a quiet, beautiful infant and child, closely attached to his mother. He enjoyed combing his mother's hair well into his teens and spent hours shopping for "just the right present" for his mother or his aunts. The father declared he had never felt close to, or understood, his son and favored an older sister born several years before the father went into the armed services. In an attempt to make a man of his son he enforced a rigid discipline and wanted to send John to a military school. The mother thwarted this move. At adolescence John suddenly became rebellious to all authority, played "hookey" and was suspended from school on several occasions because of his undisciplined behavior. He joined a gang at 14 and was involved in petty thieving. He adopted the coarse manners, speech, and accent of the so-called "hood" group in his community. When he assaulted his mother and threatened his father with a knife when the latter intervened, he was hospitalized. In spite of his "tough" manner he spent much time preening his hair and admiring himself in the mirror.

The average duration of difficulties of patients prior to admission was 2½ years. The stress of adolescence was an important precipitating factor. At this time there was a strong drive to be independent. They were unable to feel close to anyone and were preoccupied with sexual matters. The illness was precipitated by attempting to adjust to the first year of preparatory school or college in 30 patients. In 10 the illness was closely associated with serious sickness of one of the parents. The first sign of abnormal behavior followed severe virus infections or operations in 15. Ten were disturbed by a move to a new environment to which one or both parents also were reacting with signs of stress. One-third worried that others believed them to be homosexual or feared that they could not control homosexual tendencies in themselves. In their state of insecurity 40 became involved in stealing from their families and in minor pilfering in their neighborhood in an attempt to gain a sense of status or to "rent" friends as one so aptly declared. Only 10 had come to the attention of the law and in all these there was close cooperation with the courts and probation officers.

All were admitted on voluntary status, on their own signature or as voluntary minors on the application of one of the parents. The mental picture was largely that of

adolescent turmoil. Eighty-one were diagnosed as schizophrenia, 66 as catatonic, 8 simple, 6 paranoid, and 1 as hebephrenic type. Ten were diagnosed as psychopathic personality with asocial trends, and these differed from the schizophrenics in their impulsive acting out. They were more aggressive and straightforward in their acts of stealing and aggression, whereas those diagnosed as schizophrenia showed more fumbling and disorganized forms of stealing or impulsive actions. Depressive and suicidal trends were encountered in 35, usually associated with ideas of guilt and preoccupation with a sickly religiosity closely related to concerns over masturbation, homosexuality, sadistic heterosexual fantasies, or fears of losing control.

The schizophrenic reactions were always associated with trends involving projection of homosexuality and delusional thinking. The psychological tests such as Rorschach and other projective tests confirmed the clinical observations and evaluations. Eight were diagnosed as manic-depressive reactions and one as psychoneurotic.

Physically the group was interesting. Mention has been made of physical difficulties in infancy and childhood and how these factors resulted in the development of a weak ego structure, manifesting itself in poor interpersonal relations, little spontaneous interest in the environment, and a lack of commitment to work and play. At the time of admission 50% were poorly coordinated and awkward. Thirty showed some form of allergy, and 25 were undernourished. Of interest was the occurrence of myopia in one-half of the patients, and an equal number had acne, dilated pupils and vasomotor symptoms such as cold, clammy hands, and excessive and odorous perspiration associated with exertion. Only 9 showed abnormal EEG tracings and these were not associated with any particular diagnostic grouping. Two were so abnormal with clinical findings suggesting epileptic equivalents that anti-convulsant medication was administered and proved helpful.

A general disheveled appearance and the tendency to be non-cooperative in manners, clothes, style of hair cut were characteristic. Many of them had long hair which they handled and combed, frequently preening before mirrors and openly admiring themselves in a vain and effeminate way. At first they resented the structured environment where proper clothes and hair cuts were insisted upon. In their turbulent and rebellious desire to be independent they resisted the program of socialization, good manners and group participation in all activities. The physicians gained their confidence through firm support, psychotherapeutic efforts and consistent insistence upon keeping up to all expected of them in a hospital setting. Women nurses won their respect and created a homelike environment. This has been observed in all hospitals where women nurses have gradually replaced male nurses and attendants, although among acutely disturbed patients the mature male nurse plays an important and necessary role. The relationship developed with male members of the physical education and occupational therapy departments afforded opportunities for healthy male identifications. As this identification proceeded, there was a notable decrease in acting out behavior.

The following is an illustrative example :

John, referred to above, tended to disrupt occupational therapy classes by his rebellious and distracting behavior when supervised by a female therapist. However, he worked productively in printing and the wood shop under consistent and firm male guidance. At physical education he tried to hide his fears of any body contact sports and his general ineptness at athletics by standing on the sidelines making belittling remarks. A younger male physical education instructor gradually gained a relationship with him and encouraged him to develop his chest and upper arm muscles in individual exercises involving the rowing machine, chest weights and the punching bag. He was gradually introduced to ping pong, bowling, and finally group sports such as volley ball and soft ball. He eventually became the catcher on the soft ball team. Coincident with these accomplishments and interests was the gradual development of an improved and healthy relationship with his father.

In addition to skill in athletics, greater emphasis was placed on learning to enjoy group activity with consideration for others and achieving a feeling of belonging and being wanted as a member of the group. Most of these young men are afraid of the

role that must be assumed at social dances and some time is required to reach the point of full enjoyment of these functions. The same is true of group singing, card parties and other social gatherings of mixed groups. In occupational therapy great patience is required to assist them to achieve satisfaction in constructive activity. The same is true in the music and library departments. Many of the patient's reactions on the halls and in the various program therapy departments become topics for discussion in the psychotherapeutic interviews. In psychotherapy the interview method is employed with emphasis on dynamic and interpretative psychiatry. On the basis of a good relationship with his physician the patient is able to review his own personality development and learn better ways of managing in all spheres of his life.

About two-thirds of parents needed psychiatric help. Many on their first contact with the hospital appeared demoralized. At the time of admission they were anxious, sleepless, and overwhelmed by feelings of guilt over being the cause of their son's problems. They typically alternated between sobbing helplessness and loud and hostile berating of the patient for being vicious and ungrateful. Most parents were uneasy in their early relationship with the psychiatrist, misinterpreting questions involved in history taking as indications they were being accused of causing the patient's illness. Parents tended to blame each other for the patient's illness, bickered at home, before staff members, and on occasions even in front of the patient when visiting. All of them were given ample time by the physicians of the hospital and some were referred to psychiatrists in private practice when this was indicated. The Social Service Department was of inestimable value in working with parents. Efforts were directed particularly towards engaging the fathers in the understanding and rehabilitation of the patient.

Much of the acting out and delinquent behavior as well as the exaggerated heterosexual and homosexual concerns noted among this group were directly related to their difficulty in achieving male identifications. The situation was often further complicated by the hostile and rejecting attitudes of fathers. Fathers were coached as to appropriate and supporting responses to the patients' symptoms on the background of greater understanding of the meaning of these reactions. Fathers were encouraged to visit their sons without the mother's being present. During the convalescent phase of treatment, visits to sports events, fishing, hunting, vacation trips with the father as well as working together on projects of mutual interest were most helpful in the rehabilitation of patients.

Visits of mothers, particularly during the early period of hospitalization, were frequently limited as they tended to reactivate passive and dependent needs in the patient to which he responded by increased tension and an exaggeration of symptoms. At this time in spite of careful discussion and preparation, mothers often reacted to the psychiatrist as though he were intimating they were the cause of the patient's illness. Mothers felt freer talking to the social worker in a woman-to-woman relationship and could more easily ventilate their concerns with benefit. Reactive depressive reactions were not uncommon among mothers and were occasionally seen among fathers during the early period of hospitalization. Some parents required referral to a psychiatrist in their home area although most all such reactions responded well to regular visits with the hospital psychiatrist and social worker. Five mothers reacted with acute psychoses requiring short periods of treatment in a psychiatric hospital some time during their sons' hospitalizations. Each of these 5 mothers had openly displayed incestuous feelings towards their sons by such actions as the following: one mother exposed her genitals to the son on the excuse of showing him a bruise on the thigh; a second lay on top of the son in his bed while treating his facial acne; three others slept with the adolescent son. All these mothers were well aware of their incestuous strivings.

The outlook of the patient seemed definitely related to the teachability of the parents by the psychiatrist and social workers. Even among those patients who were unimproved, the parents frequently commented upon the better relationship with

their other children and the improved atmosphere of the home as a result of what they had learned.

In order to relieve suicidal trends and exhaustive states of excitement with poor appetite and sleep, 40 of the patients received ECT in addition to psychotherapy and program therapy. Insulin was used in sub-shock doses in 24 and tranquilizers were used in 15.

As the patients improved, they were moved to more free and open parts of the hospital when they could visit at home and commute to school or work. This transitional period of resuming community activities secured the rehabilitation. Therapeutic contact with patients and their relatives for prolonged periods after leaving the hospital was most helpful. The average hospital residence for the group was nine months.

Results of treatment revealed that 68 were definitely benefited by treatment, and at home, 35 of whom were considered recovered, 20 much improved and 13 improved. Twenty-eight were unimproved. One died of severe diabetes and exhausting excitement shortly after admission. Three patients died some time after leaving the hospital, two who left against advice by suicide and one who had been considered recovered was killed in an automobile accident.

The following illustrative cases are presented :

Case 1 : A 19-year-old Jewish male was admitted to the New York Hospital, Westchester Division on January 4, 1950 on voluntary minor status. For the previous two years the patient was showing increasing dependence on marijuana and alcohol, together with deteriorating social relationships. The heredity was free of mental illness. However, the father was an aggressive business man but anxious and ineffectual in the home. He suffered from bronchial asthma and had been under psychotherapy. The mother was the dominant figure, aggressive and masculine in manner. The patient was the first of two, left-handed and withdrawn as a child. The parents tended to be over-solicitous and over-protective. In school he did well scholastically but poorly socially. He had a number of athletic interests which he worked at diligently and realized considerable success. On leaving home and entering preparatory school, he was introduced to alcohol and marijuana which resulted from strong identification with an anti-social and Bohemian group. It was during this period that he formed a close relationship with one of his contemporaries in which there was mutual masturbation associated with a fantasy of women with "penises." At the time of admission he was withdrawn, tense and expressed sensations of having a "vagina" and a "bleeding" laceration of the left hand. There were homosexual concerns and great ambivalence towards his mother. The patient had considerable intellectual insight and his attitude in regard to hospitalization was good in that he recognized he had problems and wanted help. Physical status was excellent. The patient remained 6 months in the hospital showing gradual and marked improvement. There was increasing facility and ease in his interpersonal relationships. His family was cooperative and received help in gaining understanding of the patient's needs and as a result there was an improvement in his relationship with his father. He developed numerous healthy male identifications within the hospital setting. On leaving the hospital the patient returned to college and the 10-year follow-up communication with the family revealed that he had made a complete recovery and was leading a successful life.

Case 2 : A 19-year-old male was admitted to The New York Hospital, Westchester Division on September 1, 1950 with a long history of bizarre and impulsive behavior. The patient came from German Jewish and English Protestant stock. In the paternal line there was a suicide and numerous instances of psychoses. The father was a circular manic-depressive and institutionalized during the patient's formative years. The mother, an aggressive and capable person, made every effort to give the patient an adequate opportunity for a healthy adjustment. He was an only child who, during childhood and the latency period, was neurotic, withdrawn and over-weight. In school and socially he was poorly adjusted. During adolescence he was increasingly sluggish, awkward, inadequate and persisted in a strong attachment to his mother. He was in his first year of college at the time of his hospitalization, having previously received many months of psychotherapy. Prior to his admission he became increasingly inadequate socially and his behavior was marked by withdrawal and outbursts of excitement and hostility directed towards the mother. At the time of admission he was vague, circumstantial, delusional and hallucinated. He believed that his mother was keeping his father from him. Physically he was obese with poor coordination. In the hospital he became

increasingly disorganized in his thinking and behavior with periods of excited and impulsive activity. Electro-shock therapy did not reverse the process nor did it aid him in utilizing the therapeutic environment. After 13 months of hospitalization he was transferred to a state hospital as unimproved. The 10-year follow-up revealed that he had continued hospitalized with further deterioration.

Summary

The life histories of 100 young males between the ages of 14 and 19, admitted to The New York Hospital, Westchester Division from 1946 to 1956, were reviewed, with the following findings:

1. The stress of adolescence was an important precipitating factor on a background of inadequate personality adjustment dating back many years.

2. Acting out behavior included stealing, aggressive rebellion against authority, and assaultiveness particularly towards mothers. This behavior was common in both the schizophrenic and psychopathic groups which made up nine-tenths of the patients.

3. Treatment emphasized the importance of dynamic psychotherapy, as well as a well-rounded program directed towards group participation and socialization.

4. Important in treating was to provide experiences to enhance the development of strong male identification.

5. Successful outcome of treatment was related to the teachability of the parents.

6. The results of treatment were given. Two-thirds of the patients were benefited and at home.

DISCUSSION

Robert S. Garber, M.D. (Belle Mead, N. J.).—The paper is intriguing and informative, but the content does not fit the title since it is not about the treatment of troubled youth, but rather the treatment of psychotic youth, as actually demonstrated in 89 out of the 100 cases. It would be extremely interesting to know how the recovery rate reported (*i.e.*, 33 out of the 100 cases were not improved), compares with the recovery rate for adults or children of other age groups, and especially, since this group comes from a favorable socio-economic milieu and has good intellectual endowment. It is reported that school work was average in 75%; however, the school work of delinquent youths never attains 75% average in any group.

The important fact in this paper is that much of the illness seems related to separation from parents, both physically, that is, in going off to school, and emotionally, that is, in the phase of adolescence; and that the youths were most helped when their families were simultaneously provided treatment in resolving their own problems as well as in their problems of relationship with their children. This raises a basic question of prevention. The histories described are full of signs and portents of a precarious balance in adjustment for most of their lives.

Physical illness, neurological implications, accidents, personality problems, difficulty in relationships are all present. Actually, the paper points out the need for earlier detection and treatment, at a period in childhood when the parental role in the illness is both clearer and more easily reversed, when both parents and child are more accessible, rather than in adolescence.

Finally, in general, the paper reads like a good program, although not designed to treat those youths who are actually coming into conflict with society.

A COMPREHENSIVE HOSPITAL-COMMUNITY SERVICE IN A STATE HOSPITAL [1]

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This is a report of early experiences with a project to organize within the Hudson River State Hospital a comprehensive and integrated treatment service for the mentally ill in a defined population under a research design to evaluate results.

There has been set up within the hospital structure a sub-hospital—a largely complete and autonomous service unit—specifically serving Dutchess County, New York. This unit provides a broad range of treatment services which include pre-care; day hospital, night hospital and inpatient care (both acute and long term); rehabilitation services; and aftercare.

RATIONALE

The rationale of this project is as follows:

Our culture is burdened with an enormous load of disability associated with psychotic illnesses. Our present methods are not very effective in preventing or curing the illnesses, but we do now have the tools to attack the associated disability. We can relieve much of the disability which has already occurred; we can prevent its future occurrence and minimize its extent.

Our tools for preventing and reversing disability are much better than our organizational structure for bringing the tools to bear upon those that need help. Nowhere in the United States has any population been given comprehensive service which uses all the tools that we now have.

We have a tradition in our society of almost automatically hospitalizing persons with psychoses; also a tradition and current practice of not using community psychiatric facilities for the seriously ill. It sometimes appears that the richer a community is in its health, welfare and psychiatric facilities—as in large metropolitan centers—the more difficult it is to bring these to bear to help the seriously ill person.

Hospitalization as such is among the causes of disability. This is especially true of the traditional, highly security-conscious hospital.

Even where we have a great wealth of services available and a willingness to use them, it is often difficult to get flexible continuity of care for the individual patient because the services are so independent of each other. This happens even in a single large organization; when it becomes as large as the Hudson River State Hospital it almost inevitably develops specialistic compartmentation, so that patient care tends to become fragmented.

The major hypothesis to be tested in this pilot program is that chronic hospitalization and disability can be reduced by supplying the population with a comprehensive psychiatric service based upon a small, community-oriented, open public mental hospital so organized that there is maximum continuity of care over both inpatient and outpatient phases of treatment.

LOCALE

The population served by the project resides in Dutchess County, one of the 8 counties served by the Hudson River State Hospital. It is a mixed urban-suburban and rural area of about 170,000 people. They are relatively well disposed toward their state hospital and have responded well to such innovations as the open ward system. They make liberal use of the hospital and for several years Dutchess County has had the highest admission rate of all the counties in the state, the annual rate being nearly 300 per 100,000 of population.

With the help of state aid the county supports an all-purpose psychiatric clinic. This gets more referrals for emotional and adjustment problems than it can handle, and tends to refer the more seriously ill to the

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state hospital. There are no psychiatric beds or outpatient clinics in any of the general hospitals in the county. There are a few psychiatrists in private practice.

The Hudson River State Hospital is on the outskirts of the city of Poughkeepsie, the largest center of population in the county. Most of the county's residents are within half-an-hour's drive from the hospital. The hospital's patient population of 5,400 is housed in a large number of buildings spread over 1,000 acres.

The parent hospital is organized in the traditional American pattern with specialized wards and buildings for specialized functions. There is one central reception service into which all new admissions come, and specialized buildings for the infirm, the regressed, the disturbed, and diabetics or others needing special diets.

The staffing pattern is standard for New York State, with the reception service at APA standards and the continued treatment services somewhat below APA levels. There is active treatment and rehabilitation in most of the hospital and over 90% of the patients are on open wards.

There is an aftercare program which uses traveling clinics and also field social workers. Social work positions are allocated in accordance with the number of patients in extramural care which presently number about 900.

The presence of a day hospital as part of the state hospital is an almost unique asset, being one of two pilot projects set up by the Department of Mental Hygiene 4 years ago. It receives most of its referrals from the community and has won excellent community acceptance.

PROJECT

The "Dutchess County Unit" has been established in two small buildings, with a combined bed capacity of 550, which are contiguous to each other and to the medical-surgical-reception building which also houses the day hospital. Over a period of several weeks in the fall of 1959, Dutchess County patients from the continued treatment services were moved into these buildings while non-Dutchess County residents were moved out. About 85% of all Dutchess County patients have been assembled in this unit, and it is expected that the unit will eventually care for virtually every patient from the county.

Since January 12, 1960, all Dutchess County admissions have been admitted directly to the unit. The reception service patients from the county had been moved in a few days before, together with professional staff, stenographers, files, *etc.* Since then the unit has been in operation as a virtually complete and self-contained small hospital with its own reception and intensive treatment service, a full range of long-stay patients, including the infirm and the regressed, and its own aftercare service. Close working relationships have been established between inpatient, day hospital and aftercare functions with free referral between them. The only Dutchess County patients deliberately excluded from the unit are the tubercular and those with acute medical or surgical conditions. Patients in the unit needing specialized services go across the street to the medical-surgical building for x-rays, physiotherapy, dental work, *etc.*, to avoid unnecessary duplication of facilities.

The entire unit is "open" with all wards unlocked during the day. The unit has been staffed for carrying out standard functions with standard numbers of personnel. Physicians, social workers, a psychologist, nurses and aides, have been allocated as equitably as possible on the basis of the unit's patient load and rates of admission. Every effort has been made to avoid especially favoring the unit in number or quality of staff.

What has been described up to this point is simply a new method of organizing and administering present services with nothing particularly new in the services themselves. The one new function which is in process of being added is "pre-care." This we conceive as an emergency psychiatric consultation service to the community. Those who commonly initiate moves toward hospital admission, such as physicians and police, are being encouraged to first give us a call when they have a patient for whom admission is contemplated. We will send a consultant to the home, if necessary, or see the patient in the office. We believe that this procedure can often give better service to the patient without hospitalization, by

recommending certain treatment measures to the family physician, by referral to a psychiatrist or clinic, by placement in a nursing home, or by admission for day or night hospital treatment. It is also expected that those patients who are admitted for full-time hospital care will, through this advance medical contact, have a healthier relationship with the staff and make greater use of voluntary admission procedures.

The provision of this new pre-care service will require additional staff and the creation of the new positions has been made possible by a grant from the Milbank Memorial Fund.

At this point it should be emphasized that the entire Dutchess County Service is for the mentally ill for whom hospitalization appears to be in the immediate offing. This distinction is necessary both to keep the unit from being inundated with less serious problems, as well as to define our role as not competitive with the outpatient clinic or with psychiatrists in private practice.

The success of any such venture into community-based psychiatry is in large measure dependent upon community understanding and involvement. Beginning with the earliest planning stages a year before the opening, conferences were held with various community leaders. There have been many conversations with individuals and groups, and several open meetings to clarify issues. Especially helpful cooperation has been given by the county's Community Mental Health Board, and by an *ad hoc* committee of the County Medical Society set up to study the plan.

RESEARCH

It is assumed that this new organization of psychiatric care is better than that we now have. We are sure that staff, patients, relatives and community agencies prefer it; no research is needed to tell us that.

We also believe that patients will become permanently hospitalized less often, will deteriorate less frequently and severely, and will maintain their social functioning at a higher level. To know whether or not the new program will produce these changes requires systematic data-gathering and analysis.

As far as we have been able to determine, no system or organization of psychiatric services has been sufficiently well studied for us to be confident that it benefits patients more than another system. It is our intent to try to answer this question. Responsibility for these studies is assumed by the technical staff of the Milbank Memorial Fund. This staff has re-formulated the statements about the ways in which the course of psychotic illnesses may be improved by the new unit as follows.

Hypotheses to be tested:

1. That there will be fewer instances of long-stay hospitalization for psychosis than there would have been without the unit.

2. That episodes of psychotic decompensation in chronic psychoses will be less severe, and will be less frequently associated with deterioration and social disability.

3. That more Dutchess County residents who were on long-stay services in the hospital in October 1959 will be rehabilitated to the extent of being able to leave the hospital.

4. That even those who were long-stay patients and who do not leave the hospital will come to function at a higher level and be less deteriorated than if the unit had not been established.

These 4 hypotheses are in process of being tested. We are trying to think out logically and systematically what evidence is needed to test each of them. There are not many ready-made investigative tools available.

Because space does not permit detailed description of the entire research design, we will illustrate only the approach to the first hypothesis. It is necessary to specify both what is meant by "long-stay" hospitalization and the measurements of its occurrence, so that we can determine whether or not it is becoming less common. The specified measure of "long-stay" hospitalization is *continuous* hospitalization for a number of months. Leaving the hospital on convalescent status is regarded as leaving the hospital and not as staying in the hospital. It is not clear how many months of continuous hospitalization should be regarded as "long"; it may lie somewhere between 4 and 20. It is well known that the frequency of shorter periods of hospitalization

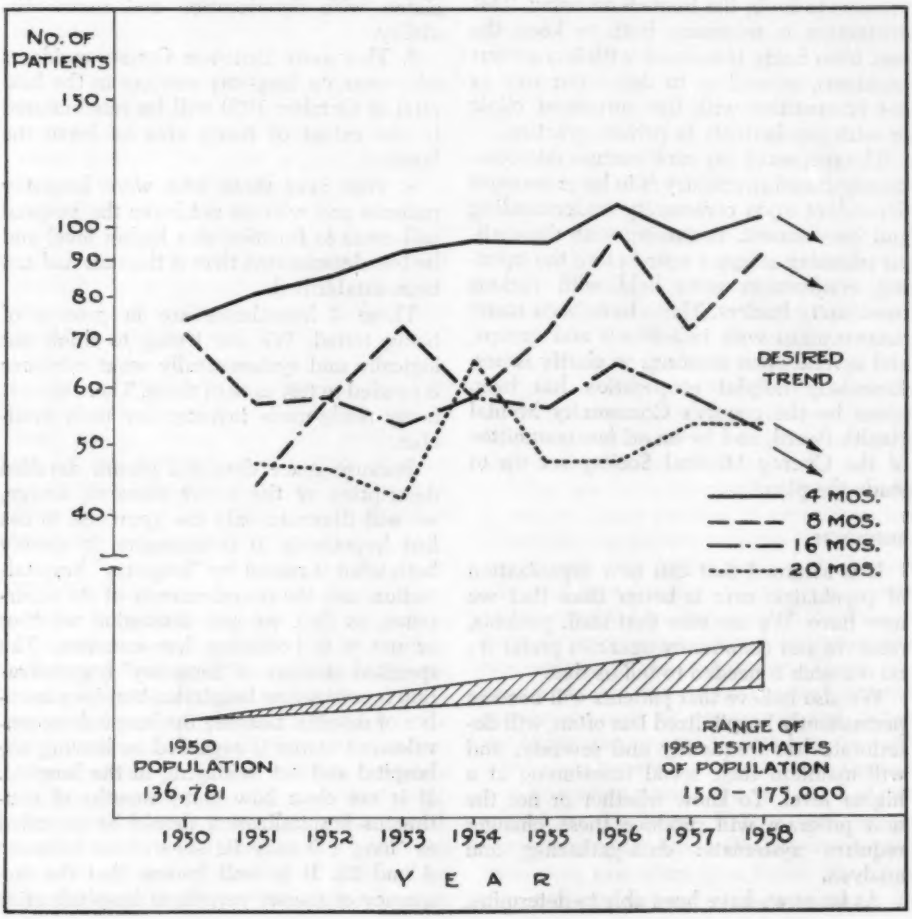
does not determine the frequency of long-term hospitalizations; the number of such short-term admissions and readmissions may even rise as a result of the unit's activities.

One measure which has been selected is the frequency with which individuals in the county experience their first long stay. This number has been determined for each of the past 10 years to get a picture of its size and stability from year to year. These frequencies are presented in Graph 1.

Each line reflects a different definition of "long stay." If 4 months is regarded as a long-stay admission, the top line shows the number of people from Dutchess County who have completed a stay of 4 continuous months for the first time in their lives, for each of the years 1950-1959. The bottom line shows the number if 20 months is regarded as "long stay." The curves in between show what is found if we use definitions of long-stay intermediate between 4 and 20 months. The arrows indicate the direction these curves will have to take to justify a conclusion that the unit has made the expected difference.

GRAPH 1

NUMBER OF DUTCHESS COUNTY PATIENTS EXPERIENCING SPECIFIED DURATION OF CONTINUOUS HOSPITALIZATION FOR THE FIRST TIME, BY YEAR



Similar curves will also be made for residents of other counties in the hospital's service district. Likewise, for comparison, these curves will be made for some counties near other mental hospitals. If these others fail to show a decline and if Dutchess County does (assuming no marked changes in population), we will be able to draw some conclusions. While it cannot be predicted with confidence that clean-cut findings will emerge, at least a forward step will have been taken toward better evaluation of changes in the organization of psychiatric care.

The methods being used to test the other 3 hypotheses will be reported elsewhere.

RESULTS

It is much too early to draw conclusions from the brief experience to date, but a few observations seem worthy of mention. The most obvious and striking immediate change is in staff attitudes, with an almost universal excitement and intense dedication to their work. Some might regard this as a contaminating artifact in the project but we consider it a *predicted* result of the administrative decision, and a verification of our assumption that a better organizational structure will produce better staff performance. Without doubt, the staff enthusiasm is in part due to pride in having been chosen for the project, but we believe that the structure itself evokes emotional identification with the small unit which is peculiarly their own. On their own initiative the staff have instituted several new treatment and rehabilitation activities; they are trying to do so much that they complain of not having enough hours or enough hands to do all they want to. All of the staff are delighted with the ease and flexibility of decision-making in the small unit; communication is immediate and face-to-face without the lengthy chain of command which can be so frustrating in a larger organization.

The unit is too small to permit classifying the patients into homogeneous ward groupings. This obstacle to traditional practice reinforces our conviction that it is better for the patients if they are in heterogeneous groupings. Two infirm wards, one male and one female, are the only wards in the unit which house just one type of patient. There are no reception wards as such: new patients are admitted to any one of the 6 wards all of which also have long-stay patients. Patients who were transferred to the unit from homogeneous regressed wards have been scattered through all wards. With rare exceptions, these regressed patients have responded quickly by becoming more alert and tidy. There is a steady trickle of long-stay patients improving and leaving the hospital; in the first three months some 30 patients who had been in hospital over a year were released, thus freeing beds for remaining Dutchess County patients to be moved in from other parts of the hospital. The early trend is in the direction of a reduced hospital population, although the number of admissions is higher than ever.

There appears to be a significant increase in voluntary admissions; in the first 3 months half the admissions were voluntary. There is also a steady increase in self-referrals to the day hospital, and the success of this service is creating a heavy demand for an evening hospital which will give active treatment during the evening hours. This latter service is not yet in being, but is planned for a later date when staff may be available.

SUMMARY

A newly organized, 550 bed hospital, rendering comprehensive, psychiatric care (day hospital, night hospital, post-hospital, pre-hospital and consultation) to residents of Dutchess County, N. Y., has been created within the 5,400 bed Hudson River State Hospital. This is designed to give continuity through close integration of a wide variety of treatment services. Early experiences with the project are reported.

Evaluation studies are testing the hypothesis that this type of service will reduce the frequency and severity of disability associated with mental illness, as measured by rates of admission, institutionalization, and deterioration.

PROBLEMS IN THE CORRELATION OF PSYCHOPATHOLOGY WITH ELECTROENCEPHALOGRAPHIC ABNORMALITIES [1]

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INTRODUCTION

The application of computer techniques to the examination of the electroencephalogram has evoked a great deal of interest. This interest results from the desire to further quantify, to dissect features in the EEG that may not be apparent to simple visual inspection. In the jargon of communication engineering : there is a great deal of "noise" in the electroencephalogram. Potential change appears in a pseudo-sinusoidal fashion that must be treated currently as "noise" because no meaningful signal appears to have been transmitted. Traditional visual inspection has contributed information that is quite helpful in a clinical setting, but it is only a rough summary of many potential "bits" of information.

Frequency analysis in various forms has been available for nearly 15 years. The EEG can be converted into a histogram based on the frequencies but in spite of the availability of such quantifiable data, few reports have appeared correlating frequency analysis with psychological data. Some of the major disadvantages are the loss of phase relationship, the inability to analyze more than one channel at a time, and the long time periods required for the analyses.

A technique which is more recent and is rapidly gaining in popularity is correlation technique, both auto and cross. A complex series of electrical changes making up the electroencephalogram is electrically correlated with itself displaced in time, or to another known and simpler series of wave forms. These techniques are very sensitive for the detection of rhythmical repetitive events marked by ongoing activity—such as evoked responses from a flashing light—but do not offer as much toward the further analysis of non-repetitive electrical activity.

Up to now, attempts to correlate EEG abnormalities with psychiatric syndromes have resulted in a notable lack of success and a great deal of confusion due to the many conflicting reports. At first it seemed to us that the problem lay in the lack of refinement in EEG interpretation based on visual inspection, and that once computer techniques became available, the relationship between psychopathology and the electrical activity of the brain would begin to manifest itself.

Recently, however, we have begun to realize that the problem lay not only in the interpretation of the EEG, but also in the evaluation of psychopathology.

For example, we recently attempted to discover if there was any characteristic behavioral or emotional pattern associated with 14 and 6 per second positive spiking in the EEG. It has been reported that children with such an abnormality, while often giving the appearance of model children, are subject to periods of impulsive aggression and may even commit murder. Our study(1), which was carefully controlled, failed to confirm the clinical observations made by others. We found no difference in aggression and impulsive behavior between these children and the control groups. While we felt that we had done as good a job as was possible with the research techniques available, certain defects in these techniques became evident.

In spite of these difficulties, we do feel that such studies should be attempted. Uncontrolled studies are almost completely worthless. We thoroughly deplore the publication of studies which state that "abnormal EEGs are found in such-and-such a percentage of disturbed children or schizophrenics or what-have-you." Blind control studies are essential, with criteria for EEG abnormality and behavioral abnormality thoroughly described.

Specifically, in terms of the 14 and 6 abnormality, almost all the work published

[1] Read at the 116th annual meeting of The American Psychiatric Association, Atlantic City, N. J., May 9-13, 1960.

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on this subject has reached premature conclusions regarding the significance of 14 and 6 per second positive spiking. These reports have been characterized by absence of control groups or poorly conceived controls, with vague descriptions of the criteria for EEG abnormality and practically no understanding of the complexities of behavior.

Perhaps one reason that investigators have shied away from more careful studies is the difficulty in evaluating and measuring behavior. This is the problem we ran into with the children in our study. We examined these patients by thorough psychiatric, psychological, and neurological examinations. Our problems arose when we attempted to quantify such factors as aggression, hostility, and impulsiveness. Accurate measures were necessary in order to compare the children who had the 14 and 6 per second spiking with the control groups. Similar difficulties arose in all areas—psychiatric, psychological, and neurological.

PROBLEMS IN PSYCHIATRIC EVALUATION

It became evident to us that it is not possible to quantify personality characteristics by means of psychiatric evaluation, except in a very gross way. For example, it might be stated that an emotionally disturbed boy "had a problem handling his hostility." This phrase can be applied to many disturbed persons, regardless of cause. When you are attempting to distinguish differences in the pattern of aggression among disturbed children, such a gross description is extremely inadequate and frustrating.

This problem is not unique to this type of study; the search for specificity has been unsuccessful in all areas of psychiatry. In evaluating acute schizophrenics, for example, it was formerly thought that the psychotic verbalizations were directly related to the etiology. When a schizophrenic heard voices accusing him of wanting to kill his wife it was assumed that his "problem with hostility" was significant in causing the psychotic break. We now realize that the things which schizophrenics are accused of by their voices are extremely stereotyped. This can be useful in psychotherapy; an omnipotent role can be assumed almost immediately with a new patient by describing the content of his hallucinations to him, much to the patient's amazement. The point is that *all* disturbed patients are bothered by hostile impulses, as well as other types of emotions, and the disturbed children in our study were also losing control of these impulses.

We were trying to find something unique about a particular group of children with a certain EEG abnormality, and were suspicious on clinical grounds that they were characterized by some peculiar, impulsive expression of aggression. However, when mixed in with a group of other disturbed children in a blind examination all groups had high percentages of children with "aggression problems"; attempts to quantify the aggression, except in a very rough way, revealed only our helplessness. Differences in quality were equally difficult to discover.

Since we have this difficulty with such a gross EEG abnormality, how will we handle a refined rhythm visible on the computer?

PROBLEMS WITH ANAMNESTIC MATERIAL AND PSYCHOLOGICAL TESTS

One would expect an emotionally disturbed or aggressive child to be diagnosed on the basis of clinical history, but the problem of further differentiation among types of aggression, so as to delineate an organically driven variety, is extremely difficult. One soon realizes that most symptoms can accompany either emotional or organic pathology. Retardation, temper tantrums, bedwettings cannot be assigned to a single cause.

Similar difficulties apply to the use of data from psychological tests. Here again the problems of the child in dealing with aggression were revealed, but differentiating subtle differences in the handling of aggression between disturbed children proved more difficult. This is true in projective tests, such as the Rorschach and TAT, as well as on the MMPI.

PROBLEMS IN NEUROLOGICAL EXAMINATION

When the neurological findings are quite gross it is apparent that there is good correlation to other evidence of brain damage. There can be little equivocation concerning the significance of the paretic limb, an ex-

tensor plantar response, or an intention tremor.

It is more difficult and uncertain to evaluate the "soft" neurological signs—a slight clumsiness, minimal changes in the sensory examination, or a subtle reflex asymetry. Brain damage removed to some degree from the main motor or sensory pathways notoriously may be difficult to detect and will be missed if the "hard" neurological signs alone are looked for. What is obviously needed is a great extension and perhaps quantification of the subtle, minimal, and more elusive findings.

DISCUSSION

These problems are not unique. However, they emphasize the primitiveness of the methods we have available to study the complex human psyche. This is not to belittle the efforts necessary to reach the present level, but rather to emphasize the work that needs to be done.

Often we become carried away by scientific progress which promises to make available all sorts of new information. Hidden EEG patterns which now are discernible have meaning only in terms of human behavior. Attempting correlations with such gross entities as psychosis, schizophrenia, neurosis, or behavior problem will lead to very little which is new or enlightening. Until the "group of schizophrenias" is broken down into meaningful subdivisions, for example, most correlations will be lost. Even a basic separation into schizophrenic reactions and "grown-up" childhood schizophrenics would be helpful, and also possible with our present knowledge.

In terms of studies dealing with attempted correlations between behavior and EEG abnormalities, it is obvious that the significant items are not grossly visible. It is only with some ingenuity and considerable effort that one can hope to pick up more subtle differences.

As an example of a currently useful technique, items which are not significant enough in themselves can be grouped with other items to form symptom or behavior profiles. In the study described earlier we formulated and used such scales as "aggressive behavior," "organic symptomatology," "emotional symptomatology," and "disturbed mother syndrome." Such scales can be formed with pertinent items from psychiatric, psychological, and neurological examinations, often yielding meanings which could not be seen in the single items.

It is only through further development of more subtle measures that studies in this area can become meaningful. Better methods of quantifying psychiatric and psychological examinations are needed. The development of computor techniques points up the inadequacies of our methods for evaluating behavior and emotional content. It should spur us to meaningful research in this area.

SUMMARY

1. Frequency analysis has been available for nearly 15 years, but its inherent disadvantages have limited its use in correlating the EEG with clinical data. Auto-correlation and cross-correlation techniques are more recent and hold considerable promise.

2. The use of these techniques will add little to our present knowledge unless we also improve our methods of quantifying behavior and psychopathology.

3. Most studies of EEG abnormalities in psychiatric syndromes have little value because of lack of controls and poorly-defined EEG and behavioral criteria. This has been true in studies of the significance of 14 and 6 per second positive spiking.

4. Research should be directed toward developing techniques which will enable us to quantify behavior and emotional impulses in a more accurate and scientific manner.

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THE EFFECT OF PHENOTHIAZINES ON THE INTERACTIONAL BEHAVIOR OF SCHIZOPHRENIC PATIENTS [1]

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Evaluation of behavioral change in schizophrenics is usually dependent on either subjective judgments of the physician or on the interpretation of verbal material obtained as a reaction to more systematic procedures. To obtain precise information about one aspect of the patients' behavior, we employed the interaction chronograph procedure which provided measurements of the duration and frequency of action. In our formalized interview we obtained laboratory data which enable us to predict the patterns of behavior participated in by the individual in other interactional situations. We hypothesize that upon further analyses of the data, patterns of interaction will become evident which may ultimately prove useful in classifying human behavior. This investigation was based on the hypothesis that interactional patterns would be modified by phrenotropic drugs and this would provide an objective method to evaluate clinical response to psychopharmacological therapy.

By introducing measurements of activity, aggressiveness, initiative, dominance and other factors as defined in the interaction chronograph method we can make specific quantitative comparisons between patients' response to phrenotropic drugs. This paper presents data on the effects of phenothiazines in a group of hospitalized psychotic patients. We have selected a group showing a wide range of activity levels in order to obtain a sample of the hospital population. Through this study, we expect to establish the effects of these drugs on behavior and to demonstrate any uniformities which may be present.

PROCEDURE

Twenty-seven patients were tested by the standardized interaction chronograph (stress) interview. The timing of their responses was recorded by an unseen observer using a portable interaction recorder. The results were tabulated on the interaction chronograph computer and further analysis was made and is presented, in part, in this report.

The patients were selected from various wards at Rockland State Hospital. They included 12 chronic female patients, 3 acute females, 4 chronic male patients and 8 acute males. None of the patients had any complicating physical disorders nor were any mentally defective.

The standardized interview used has been described in detail elsewhere(1). The only significant difference in the procedure used in this study is that combinations of variables were used to obtain average activity and average maladjustment figures. An initial interview was given to the patients before they received drugs. A second interview occurred between 4 and 6 weeks after the initial interview.

In that paper(1) we described the measurements of action and silence (inaction) which represent basic variables from an operational point of view. To make our measurements comparable with work on animals and earlier publications on interaction(2, 3, 4, 5) we have used the average net difference between action and silences during the base period of the interview. Our hypothesis is that the individual tries to achieve a balance between periods when he cannot or does not talk because the other person is doing so, as against those periods when he is playing the active role. Similarly, we have used what we term an average net maladjustment score. This is made up of the net difference between the length of a person's interruptions, counted as positive, and the length of his latencies to respond, counted as negative. Thus, if the average maladjustment is positive, there were longer interruptions than failures to respond; if

[1] This study was supported in part by Public Health Service Grant MY 2350.

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negative, there were longer latencies. This is based on a second hypothesis: that adjustment is analagous to a servo process and that over-long hesitancies in one interval are balanced by a speeding up and the possibility of interruption in the next.

The 27 schizophrenic patients were given one of the phenothiazines: Trilafon (perphenazine), Compazine (proclorperazine) or Thorazine (chlorpromazine) with the dosage titrated to alleviate the individuals' presenting symptoms. Our experience with the administration of these phrenotropic drugs in man indicates that they have three major types of activity: (a) sedative, (b) increased motor and (c) antipsychotic. The antipsychotic effect is demonstrated by definite behavioral improvement with a significant reduction in aggressive behavior, lessened emotional tension, a decrease in hallucinations and delusions and some improvement in affect.

RESULTS

Table 1 presents the data on the 27 patients and shows that the range of average activity rate in the initial interview was from 5.9 hundreths of a minute (3.5 seconds) to an extreme high of 1112.5 (11.1 minutes). Data indicate that in this series, there are no significant differences in the activity range between men and women. It should be noted also that this series was limited to patients whose base activity rate in the first interview was not negative, that is, the durations of the actions were longer than their silences. Only a relatively small number of patients with negative activity were available and they will be mentioned in the discussion.

Each patient shows a decrease in activity level from the first to the second interview associated with the administration of a phenothiazine preparation. The drop in activity is significant by t-test at the .01 level. It should be emphasized that no significant changes on reinterviewing of controls are encountered as Saslow and Matarazzo have demonstrated in a number of studies(6).

The most interesting finding, however, is that the amount of drop from the first to the second interview, given in the third column, is a function of the level of activity shown in the initial interview. Calculation of the coefficient of correlation yields a Pearsonian r = –.987.

TABLE 1

PATIENTS ON PHENOTHIAZINES—BASE PERIOD ACTIVITY 1ST AND 2ND INTERVIEW

	Activity Base Interview 1	*Activity Base Interview 2*	Δ
Females			
Kr	5.92	2.55	–3.37
Th	8.21	5.79	–2.42
Ch	54.70	43.38	–10.32
Ho	68.71	12.52	–56.19
Gu	279.00	–1.42	–280.42
Sa	24.78	14.57	–10.21
Ki	139.50	39.27	–100.23
Wi	38.91	18.88	–20.03
Ro	42.60	39.00	–3.60
Re	26.65	14.59	–12.06
Sp	58.70	53.33	–5.37
Eg	17.31	7.41	–9.90
Pa	961.25	22.14	–939.11
Ry	176.00	29.86	–146.14
Ba	105.50	32.31	–73.19
Males			
De	61.60	9.92	–51.68
Ga	60.00	–117.82	–177.82
Ni	334.00	56.70	–277.30
Jo	238.67	110.75	–127.92
Ha	85.40	23.75	–61.65
Wi	80.33	49.80	–30.53
Co	1112.50	197.83	–914.67
Le	33.00	21.42	–11.58
Fa	16.43	10.41	–6.02
Cor	150.60	95.20	–55.40
Fo	25.50	19.70	–5.80
Mc	417.80	99.83	–317.97

N = 27 Mean = 171.24 Mean = –.137.44

t = 2.872

Significant at .01 level.

Correlation between Activity Level in Interview 1 and amount of drop after tranquilizer.

r = –.987

In a series of 27 a Pearsonian r of this magnitude is highly significant at the .01 level. In other words, the results from this series confirm the clinical observations that the greater the activity of the patient, that is, the more hyperactive he is, the greater the effect on his activity as a result of the administration of phenothiazines. The male patient with the highest activity, indicating that he talked on the average of over 11 minutes in a response, dropped during

medication to an average of slightly under 2 minutes. The low activity patients show very minor drops. Figure 1 presents these results in graphic form to illustrate the nature of the correlation.

Table 2 presents the data on the same patients for average net maladjustment. Here the results are not as clear since the significant difference between men and women is in association with the quantitative character of the maladjustment. The 15 women with two exceptions, all show a drop in adjustment from the first interview and the t-test is significant at the .01 level. On the other hand, the men show no systematic change in their average maladjustment scores from the first interview to the second and if the t-test were used the change would not be significant.

Examination of the figures for the 5 men and 13 women whose net maladjustment is positive (that is, where the durations of interruptions are significantly greater than the latencies of response), indicates a

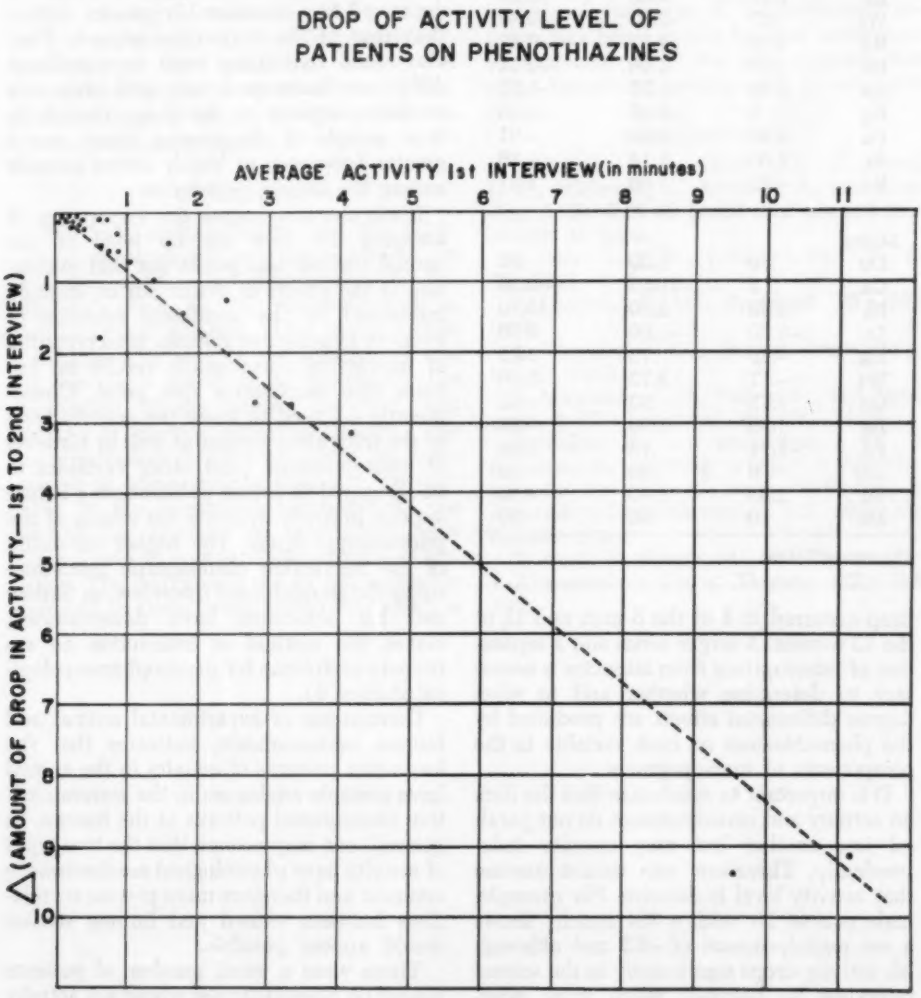

FIGURE 1

TABLE 2

PATIENTS ON PHENOTHIAZINES—AVERAGE NET MALADJUSTMENT 1ST AND 2ND INTERVIEW

	Adjustment Base Interview 1	*Adjustment Base Interview 2*	Δ
Females			
Kr	1.58	–.15	–1.73
Th	.21	–.57	–.78
Ch	.70	1.38	.68
Ho	2.86	1.28	–1.58
Gu	–5.00	–6.11	–1.11
Sa	.44	–2.14	–2.58
Kl	1.80	–.45	–2.25
Wi	.17	–2.13	–2.30
Ro	4.70	1.23	–3.47
Re	4.18	2.04	–2.14
Sp	3.30	1.75	–1.55
Eg	0	–2.45	–2.45
Pa	4.00	3.09	–.91
Ry	2.00	1.14	–.86
Ba	–.25	1.56	1.81
t = 4.12 significant beyond the .01 level.			
Males			
De	.80	1.36	.56
Ga	.75	–79.55	–80.30
Ni	–8.50	2.20	10.70
Jo	–8.50	–1.00	9.50
Ha	–.40	.75	1.15
Wi	–.17	3.73	3.90
Co	1.75	.83	–.92
Le	1.38	1.00	–.38
Fa	–1.71	.73	2.44
Cor	0	.20	.20
Fo	2.35	1.45	–.90
Mc	0	.50	.50
t = not significant.			

drop occurred in 4 of the 5 men and 12 of the 13 women. A larger series and a separation of interruptions from latencies is necessary to determine whether and to what degree differential effects are produced by the phenothiazines on each variable in the components of maladjustment.

It is important to emphasize that the data on activity and maladjustment do not parallel one another but may operate independently. Therefore, one cannot assume that activity level is decisive. For example, male patient Ni. with a 334 activity shows a net maladjustment of –8.5 and although his activity drops significantly in the second interview he becomes much more interruptive and far less latent. On the other hand, female patient Ry. with an activity of 176 drops substantially in the second interview and also shows a lower value in net maladjustment of 2.0.

DISCUSSION

Much of the work done to evaluate drugs in the laboratory phase of their development involves the measurement of locomotor activity in laboratory animals, usually the rat. Irwin(7) and his associates have shown, using perphenazine, that the locomotor activity of the hyperactive rat is depressed to a considerably greater degree than that of the hypoactive animal. They also found that there were no significant differences between female and male rats in their response to the drug, though in their sample of the species, there was a greater frequency of highly active animals among the female population.

Irwin also emphasizes the importance of knowing the base activity level of the animal studied and points out that evaluation of the effects of drugs can be strongly influenced by the accidental selection of hypo- or hyperactive animals. Interpretation of interaction chronograph results on humans also emphasizes this point. Consequently we need to know the activity level of the individual patient as well as his level of maladjustment (and other variables to be discussed in future publications) before we can properly evaluate the effects of the phrenotropic drugs. The higher reliability of the interaction chronograph procedure using the standardized interview, as Saslow and his associates have demonstrated, makes the method of interaction an extremely useful one for psychopharmacological studies(6).

Comparison of experimental animal and human measurements, indicates that the locomotor patterns of activity in the animal have possible analogues in the communicative interactional patterns of the human. In general, one may assume that the two types of activity have physiological mechanisms in common and therefore more precise correlations between animal and human studies would appear possible.

There were a small number of patients placed on phenothiazines whose net activity level was negative. In some of these pa-

tients, phenothiazines increased rather than decreased the net activity. This was probably due to a decrease in silences with little or no change in the relatively brief duration of actions. We do not, however, have a large enough series to come to any definite conclusions; rather, the evidence from this series of patients with activity on the positive side strongly suggests that the duration of actions is what is affected and that the higher the action the greater the drop. Periods of silence (inaction) as well as pronounced latencies appear to be affected in ways which we do not as yet understand. It may be possible to differentiate the behavioral activity of phenothiazines as well as other psychopharmacological agents by the interaction chronograph technique.

Conclusion

We have demonstrated that the interaction chronograph interview provides an objective method for determining the behavioral effect of the phenothiazines in schizophrenic patients. This method then contributes in part to the solution of one of the major problems of psychiatry, the evaluation of the nature, direction, and degree of change following therapy. The administration of phenothiazines has been shown to affect specific variables, measurable by the interaction chronograph; the identifiable changes in interaction have been found to correlate with clinical evaluation. The response of the 27 schizophrenic patients to these drugs shows that there is a significantly high correlation between activity levels and drug effects.

Average net maladjustment drops significantly in the females but not in the males. This appears to be dependent upon a high positive maladjustment (aggressiveness) rather than a sex difference, since most of the males in the series predominantly show marked latency of response. The few males with high positive maladjustment also show drops comparable to that of of the females.

The effect of phenothiazines on the interactional behavior of schizophrenic patients has been shown by this procedure. Further analysis of the data suggests that other behavioral criteria will become evident.

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CLINICAL NOTES

(The Clinical Notes report the findings of the authors and do not necessarily represent the opinions of the Journal.)

THE RELATION OF ATTITUDE TOWARD MEDICATION TO TREATMENT OUTCOMES IN CHEMOTHERAPY [1]

DONALD R. GORHAM, PH.D.,[2] AND LEWIS J. SHERMAN, PH.D.[3]

Several recent articles have emphasized that a patient's response to medication is due not only to the purely pharmacological properties of the drug itself(1, 3, 7) but, rather, is a complex function of the interaction between 3 classes of variables : drug, situation, and person(13). There is a growing body of evidence that the personality of the drug recipient and the total social setting in which the drug is administered are important determinants of a patient's response to chemotherapy(5, 9, 10, 11, 12).

The purpose of this study was to investigate the influence of one of these non-drug determinants, *viz.*, the relationship between a patient's attitude toward medication and his response to a drug. It was hypothesized that patients holding positive, favorable, and enthusiastic attitudes toward drugs would show a greater response than patients not so favorably disposed to this mode of treatment. Indirect support for this hypothesis has been demonstrated by those investigators who found that physicians favoring drug therapy had a greater degree of success than those opposing the use of drugs in treating mental illness(4, 6).

Sherman(14) has recently described the construction of a projective sentence-completion test to measure patient attitudes toward medication. This version of the test is still preferred for the intensive study of individual subjects since it furnishes a rich vein of clinical material. However, for the large scale research project reported here, a briefer multiple-choice form was developed which yields essentially similar information and is objectively scorable. The 4 completing statements for the stem of each item consist of one which expresses a positive attitude toward the benefits of taking medicine, one a negative attitude, one a neutral attitude and one a statement concerning a side effect. The following are some examples of the test items and their scoring categories :

1. Since I started taking medication
   - –A. I have been getting pills. (Neutral attitude)
   - –B. I feel sleepy. (Side effect)
   - –C. I feel worse. (Negative attitude)
   - –D. I feel better. (Positive attitude)
2. I take medication because
   - –A. I am forced to take it. (Negative attitude)
   - –B. I want to get well. (Positive attitude)
   - –C. I want to increase weight. (Side effect)
   - –D. This is a hospital. (Neutral attitude)

In scoring, the positive choices were assigned 3 points; the neutral and side effects choices, 2 points and the negative choices, 1 point. A pilot study conducted at Waco and Perry Point VA Hospitals indicated that the scale was within the comprehension of chronic schizophrenic patients and presented no difficulties in administration. About 80% of the 76 patients in the pilot study were able to complete the scale; test-retest reliability on a sample of 45 patients proved to be .79.

The test was completed by 369 patients which was 80% of the number included in Project IV. A factor analysis of the 14 items

[1] Part of Project IV of the Veterans Administration Cooperative Studies of Chemotherapy in Psychiatry (2). Portions of this paper were presented at the Veterans Administration Research Conference on Cooperative Studies in Psychiatry, Cincinnati, June 6, 1960.

[2] VA Central NP Research Laboratory, Perry Point, Md.

[3] VA Hospital, Brockton, Mass.

showed that most of the variance was taken out by the first centroid factor. Each of the 14 items had a high correlation with this factor, with 12 co-efficients exceeding .90. For all practical purposes, then, the total score of the scale is a valid single index of the patient's belief that medication will improve his psychiatric condition.

In the main study, psychiatric interviews using the Inpatient Multidimensional Psychiatric Scale (IMPS) (8) and ward observations recorded in the Psychotic Reaction Profile (PRP)(9) had been gathered at the beginning and end of the 20 week treatment period. These scales had been keyed to yield the following 17 symptom measures :

IMPS ; excitement, paranoid projection, disorientation, agitated depression, perceptual disorganization, motor disturbance, hostile belligerence, withdrawal, grandiose expansiveness, conceptual disorganization.

PRP ; thinking disorganization, withdrawal, paranoid belligerence, agitated depression, resistiveness, dominance, activity level.

RESULTS

The hypothesis that the attitude of patients toward their treatment is related to treatment response as measured by these 17 criteria was tested for the patients in Project IV. When all patients were considered, without taking into account differential drug treatment, there were no statistically significant relationships. In other words, for these 369 patients, changes in symptom areas were not related to patient belief in the efficacy of medication.

When the patients were considered by drug groups one relationship statistically significant at the .01 level and three at the .05 level appeared. Since the 17 factors were analyzed separately for 5 drug groups making a total of 85 statistical tests, these 4 significant relationships are about what might be expected by chance. It should be noted, however, that these 4 relationships were all in the expected direction ; *i.e.*, symptom relief was related to positive attitude toward medication.

The relationships between attitude toward medication and pre-treatment symptom measures were found to be statistically significant (.01 level) for 6 of the criteria : IMPS ; paranoid projection, perceptual disorganization, hostile belligerence and conceptual disorganization, PRP ; paranoid belligerence and resistiveness. This cluster of factors which approximates the paranoid syndrome of symptomatology suggests that the more paranoid the patient, the less faith he has that he might be helped by medication.

SUMMARY

An Attitude Toward Medication Scale was administered before and after treatment to 369 patients in a large-scale chemotherapy study. The hypothesis that the attitude of patients toward medication has an important bearing on treatment effect was not upheld with this population of chronic, apathetic schizophrenics. Medication attitude, however, was significantly related to a cluster of symptoms that tend to characterize paranoid schizophrenics indicating that the more paranoid the patient, the less faith he had that he might be helped by medication.

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THIORIDAZINE HYDROCHLORIDE [1] IN THE TREATMENT OF BEHAVIOR DISORDERS IN EPILEPTICS

PABLO M. PAUIG, M.D., MARIE A. DELUCA, M.D., AND ROGER G. OSTERHELD, M.D.[2]

The treatment of behavior disorders in epileptics constitutes a difficult problem, especially in institutionalized patients. These disorders include hyperactivity, aggressiveness, irritability, stubbornness, temper tantrums and destructiveness. Mental deficiency often accompanies or follows epilepsy and represents a significant feature of the behavior pattern evidenced by these cases.

Preliminary observations in a small group of patients indicated that Mellaril exerted a beneficial effect on behavior disorders and prompted us to undertake the full-scale evaluation reported here. For this purpose, 100 patients were randomly selected from the adult and pediatric services of this hospital for epileptics and treated with Mellaril for periods ranging from 3 to 10 months.

Dosage was titrated as much as possible in each case, starting with 10 mg. daily in children and 25-50 mg. daily in adults, and increasing by similar increments until optimum effect was obtained. Maximum dosage was 150 mg. daily in children and 600 mg. daily in adults. Blood counts were performed before, during and at the close of this study. Periodic examinations were made to detect any untoward reactions, while disturbances and seizures were recorded on each patient's chart as they occurred.

RESULTS

Analysis of the patient's behavior patterns at the conclusion of the study revealed the following: markedly improved, 61; moderately improved, 28; no change, 11.

Criteria for assessment included ward behavior, number and degree of temper tantrums and manageability. Those rated markedly improved became generally more sociable, friendly, easily manageable and free from destructive behavior patterns. A rating of moderate improvement was applied to those showing a reduction in incidence and degree of behavior disorders, but not complete control thereof.

It became evident during the course of the study that convulsive seizures were also being influenced and an analysis of the patient charts showed:

No seizures after the institution of Mellaril therapy, 23 patients

Decrease in number of seizures, 41 patients

No change in number of seizures, 20 patients

No seizures before and during administration of Mellaril, 16 patients

Increase in number of seizures, 0 patients

Total, 100 patients

No alteration in blood counts, red, white and differential, was encountered in any patient in this series, nor was there any evidence of jaundice, extrapyramidal symptoms, photosensitivity or dermatitis.

DISCUSSION

Zarling and Hogan's(1) report that Mellaril is effective in the treatment of behavior disorders led to the study described here. Considerable improvement in behavior was obtained with Mellaril, but equally significant was the increased control of epileptic seizures. This was unexpected in the light of reports(2, 3) that other phenothiazines appeared to have an epileptogenic tendency. Rather, our study revealed that seizures did in fact decline as behavior disor-

[1] Mellaril, Sandoz Pharmaceuticals.

[2] Respectively: Staff Psychiatrist, Clinical Director, and Superintendent, Monson State Hospital, Palmer, Mass.

ders were controlled. Since Mellaril does not itself demonstrate anticonvulsant activity (4) its effect on seizures must be ascribed to the reduction of hyperactivity and emotional disturbances which serve to trigger convulsive attacks. Anticonvulsant medication was maintained throughout and must be considered indispensable in the treatment program for such patients.

Summary

Mellaril was evaluated as treatment of behavior disorders in 100 epileptic patients in a study extending over a period of 3 to 10 months. Marked improvement in behavior was achieved in 61 patients and moderate improvement in another 28 patients.

An unexpected consequence was the concomitant reduction in epileptic seizures, 64 of the 100 patients exhibiting no or fewer convulsive attacks during the administration of Mellaril. This provides tacit evidence that control of the emotional factors can exert a beneficial effect on seizures. However, it is emphasized that specific anticonvulsant medication was continued throughout the course of this study.

Repeat examinations failed to reveal any signs of jaundice, photosensitivity, blood dyscrasia, extrapyramidal stimulation, or dermatitis.

Conclusion

This study has shown that Mellaril is an effective agent in the treatment of behavior disorders in epileptic patients and that relief of these also results in a reduction in convulsive seizures. Its usefulness was enhanced by the absence of untoward reactions within the dose ranges which were used in this evaluation. These findings suggest more extensive investigation to determine its potential in the total rehabilitation of epileptics.

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METHOXYDONE (AHR-233) IN HOSPITALIZED NON-PSYCHOTIC PATIENTS

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A double blind study[3] of 5-(o-methoxyphenoxymethyl)-2-oxazolidone, AHR-233 and inert placebo was conducted to study the former's alleviation of signs and symptoms in non-psychotic hospitalized psychiatric patients. Methoxydone is a muscle relaxant which may have selective action for states of marked tension, anxiety and agitation with depression, in hospitalized mental patients with chronic or acute psychoses.[4]

All male psychiatric patients admitted to a general hospital over a 6-month period who met the following criteria were entered into this investigation : age under 55, not psychotic, no organic brain syndrome, intelligence high dull normal or better, and medically cleared for study. Experimental (SS) and placebo (KK) groups were initially matched patient for patient according to the degree of anxiety as measured by the Taylor Manifest Anxiety Scale. Two evaluation instruments were used. One, the aforementioned Manifest Anxiety Scale, was a questionnaire which reflected somatic, behavioral, and/or psychic symptoms of anxiety as perceived by the patient within him-

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[2] Chief Psychiatry Service, Albany Veterans Hospital, and Associate Professor of Psychiatry, Albany Medical College.

[3] These data were gathered at Albany Veterans Hospital where methoxydone was kindly supplied by A. M. Robins Co., Inc.

[4] Denber, H. C. B. : Am. J. Psychiat., 115 : 360, Oct. 1958.

self. The second, an observational Clinical Psychiatric Rating Scale amenable to quantification, was completed by the patient's hospital psychiatrist from his knowledge of the patient as gained through interview, observation, and discussion with ward personnel. On this rating scale the patient was scored 1 (Absent), 2 (Minimal), 3 (Moderate), 4 (Strong), or 5 (Marked) for each of the following: Anxiety and/or Tension, Depression, Sleep Disturbances, Excitability and/or Emotional Instability, Suspicious-Sensitive, Hostility, Overinhibited-Rigid, and Inability to Concentrate. These part scores were summated to give an over-all total pathology score. The items were initially selected as having some relationship to the kind of symptom or sign which methoxydone might be expected to alleviate.

Evaluations on the Manifest Anxiety Scale and the Clinical Psychiatric Ratings were made pre-drug (1-2 days before medication was started); 3 weeks after medication was begun; 6 weeks after medication was begun, at which point it was discontinued; and 2 weeks following discontinuation. Methoxydone dosage was 400 mg. t.i.d. Placebo was administered in similar form and frequencies. No toxicity signs were observed for methoxydone, nor were there any side reactions later traceable to that drug. The technique of paired matchings was employed for the statistical analysis of results on each instrument. The results for the Manifest Anxiety Scale are based upon sample size N=14 in each of the two matched groups SS and KK, while the results for the Clinical Psychiatric Rating Scale are based upon N=16 for each of the two matched patient groups.

Results revealed similar outcomes for the experimental and control groups on the Manifest Anxiety Scale scores and on the Clinical Psychiatric Rating Scale total pathology scores. Both groups improved through hospitalization *per se*. But there was no evidence that methoxydone speeded recovery or alleviated signs or symptoms any more effectively than did placebo. A separate analysis made for the "Anxiety" part-score of the Clinical Psychiatric Rating Scale gave no better outcome. Hence, for this non-psychotic sample under these conditions and within these dosage limits methoxydone proved to be ineffective.

HYPOTENSION ASSOCIATED WITH THIORIDAZINE HCl

DAVID W. SWANSON, M.D.[1]

Hypotension has been an undesirable effect in the phenothiazines. This has ranged in magnitude from circulatory collapse to mild complaints of faintness.

Thioridazine HCl (Mellaril) has been reported to be superior because of the low incidence of side effects and toxicity(1, 2). The following case reports indicate hypotension is an exception that must be considered in this therapy.

Case No. 1: This 30-year-old normotensive man had received chlorpromazine, 600 mgm. daily, in January without any side effects. He had no positive allergic history. In March he was begun on thioridazine 50 mgm. t.i.d. One hour after the second dose he staggered into the hall appearing pale and fell to the floor striking his head. His blood pressure was 88/50, pulse–60 and his arms appeared "blotchy." A hypersensitivity reaction was considered. Twelve hours later upon assuming the upright position his blood pressure was 84/56, the pulse thready and return to bed was necessary. One week later he began receiving proclorperazine which was tolerated satisfactorily.

Case No. 2: A 25-year-old woman with a blood pressure of 120/70 on admission showed a diminished pressure on thioridazine 25 mgm. q.i.d. (90/60). After 24 hours on 50 mgm. q.i.d. she complained of being weak, dizzy, nauseated and faint. At that time the blood pressure was 60/0 and the pulse 60. This patient demonstrated objective hypotension on other phenothiazines also.

Case No. 3: A 19-year-old girl received thioridazine which was gradually increased to 100 mgm. q.i.d. and then began complaining of

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"feeling weak and dizzy." Almost daily her medication had to be withheld once or twice because of hypotension (90/54 to 72/50). When the dosage was reduced to 25 mgm. t.i.d. her normal pressure of 120/75 returned.

Case No. 4: This was a 31-year-old normotensive woman who became persistently hypotensive (90/60) on thioridazine 50 mgm. t.i.d. This was also noted when she received proclorperazine 25 mgm. b.i.d. (86/60). She had no subjective complaints referable to her decrease in pressure.

Case No. 5: A 44-year-old woman showed no indication of side effects during her first month on thioridazine in doses to 150 mgm. t.i.d. Then hypotension as low as 80/60 was noted daily even as the dosage was being decreased. When medication was stopped a normal pressure of 118/75 returned.

Comment

It would seem that hypotension is at least one side effect that thioridazine (Mellaril) has in common with the other phenothiazines. The effect on blood pressure in these cases was unpredictable, not dependent on dosage or length of administration.

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CASE REPORTS

CASE REPORT OF AN ACUTE OVERDOSAGE OF NARDIL[1]

SAM H. BENBOW, M.D.,[2] AND WM. C. SUPER, M.D.[3]

The monoamine oxidase inhibiting drugs are becoming increasingly widespread in their usage. They are used extensively in depressions, and recently one of them, Nardil, has been suggested to be of value in the treatment of angina pectoris, rheumatoid arthritis, and psoriasis(1). Due to their widening employment and because they are used primarily in patients with depressive features we feel that acute toxic overdosages of the compounds of this group will appear in increasing frequency.

This case report concerns a 42-year-old white female, who has been a patient here 8 times since 1953, having been diagnosed as a schizophrenic reaction on 7 of the 8 admissions with paranoid type predominating.

The general clinical picture on previous admissions has been one of depression, psychomotor retardation, and paranoid delusions with occasional auditory hallucinations. Agitation has never been prominent.

Three days prior to the present admission a local physician had prescribed Nardil: tabs 60, 15 mgm. t.i.d. On that day the patient took 3 tablets and the following day, 4 tablets. On the day prior to admission she ingested 40 tablets at approximately 5:00 P.M. No nausea and vomiting or gastric lavage was reported. No unusual behavior was noted that evening. The patient was awakened at 6:00 A.M. on the day of admission after an uneventful night, and was noted by the husband to appear "drunk." She could not stand up, and slowly during the morning her speech became thickened and incoherent.

The patient was first seen on the psychiatric ward approximately 19 hours following the reported ingestion. When seen initially, she was unable to hold her head up, could walk only with assistance, and was disoriented in all spheres. She rapidly became delirious on the ward, screaming incoherently, and required physical restraints.

Physical examination revealed her to be in good physical condition with the following additional findings: B.P. 170/120 (on all previous admissions B.P. approx. 110/70), pulse 100, respiration 22.

Fixed, equally dilated pupils and generalized hyperactive deep tendon reflexes were noted. There were no abnormal reflexes elicited, and eye grounds were not remarkable. Also prominent were isolated muscle fasciculations over trunk, extremities, and especially the jaw. There was no vomiting.

Her hospital course was complicated by a moderate dehydration on 2nd hospital day secondary to actively struggling against restraints in an extremely warm environment. Patient was rehydrated via nasogastric tube over next 24 hours. Patient's temperature rose to 105 degrees on 2nd day and remained for 24 hours at this level. Urine output during this time was 725 cc. No clinical evidence of infection was found; however the temperature dropped precipitously 12 hours after antibiotics were begun. A possible central hyperthermic reaction to the drug cannot be ruled out as the basis for the fever.

Over the next 5 days the above signs slowly disappeared. The muscle fasciculations were gone by the 3rd day, temperature normal by 3rd day, pupils returned to normal by 4th day, as did DTR's. Manic behavior, including disorientation, paranoid delusions, auditory and visual hallucinations, disappeared by 5th hospital day. B.P. slowly decreased to normal (110/70) by 5th day (all supine recordings). An FBS, Thymol Turbidity, and Ceph. Floc. determined on 2nd hospital day and 3 wks. later were within normal limits.

It has been reported that side effects of continued Nardil therapy include: hypo-

[1] Phenelzine dihydrogen sulfate.

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[3] Director of Psychiatry, Independent Psychiatric Unit Charity Hospital, New Orleans, La.

tension, altered liver function tests, micturition, occasional rash, and nausea and vomiting(2). None was seen in this case of acute toxic overdosage. Hypertensive reactions and hypomania have been ascribed to sensitivity reactions(3). Features of severe overdosage reported and not seen in this case include angina-like pain, migraine-like headache, convulsive seizures, opisthotonos, and pinpoint pupils(4).

In summary the patient represented a medical supportive problem the main features being : confined to bed, sedated with Sparine, and strict attention to water and electrolyte balance. This oral dosage of Nardil represents approximately 12 mgm./Kgm., and apparently was cleared by the patient in 5 days with no residual damage being detected. It is felt that high acute dosage of this drug represents a life-endangering situation if adequate supportive measures are not rendered.

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POST-THYROIDECTOMY PSYCHOSIS TREATED WITH IMIPRAMINE

CHARLES A. CAHILL, M.D.[1]

Psychosis associated with hypothyroidism is a well-known but complex disorder whose treatment is frequently unsatisfactory unless the symptomatology is a direct consequence of the deficiency in circulating hormone. If the latter be the case, thyroxin is curative ; otherwise, treatment methods run the gamut with varying degrees of success. The following case report describes the use of imipramine [2] in a post-thyroidectomy psychosis which failed to respond to thyroxin alone.

Case Report : A 21-year-old WSM enlisted man came to the surgical outpatient department two months after a subtotal thyroidectomy for toxic goiter with complaints of weakness, tension, and feelings of worthlessness. When a repeat radioactive iodine uptake was found to be 8% (hypothyroid) and the conversion ratio, 15% (low euthyroid), thyroid extract in doses of one grain b.i.d. was prescribed. A few days later, however, the onset of overt somatic and self debasing delusions, blunted affect and perception, and psychomotor retardation made it necessary to admit the patient to the psychiatric service. Significant details in his past history included a record of ineffective performance during basic training, difficulty in school, and a rigid, punitive upbringing in a small midwestern town. An EEG recorded not long after admission was characterized by diffuse slow activity of 4-5/sec. frequency, but it could not be stated with certainty that this pattern was of cortical origin ; the entire record was felt to be of only borderline abnormality.

With a working diagnosis of psychotic depressive reaction secondary to thyroid deficiency, the patient was maintained on thyroxin alone plus the usual ward milieu therapy. His grossly psychotic symptoms gradually remitted to some extent over the next 6 weeks, but after he was transferred to an open ward, marked motor and intellectual retardation reappeared along with delusional ideas concerning what he fantasied to be the relationship between his operation and punishment for sexual activity (especially masturbation). A battery of psychological tests given at this time was suggestive of schizophrenia, but the results were not felt to be definitive in view of his overall depressed condition. The patient was not clinically myxedematous, although a repeat RaI was 3% and the conversion ratio, 7% (of questionable significance, however, in the presence of thyroxin therapy). Phenelzine [3]

[1] From the neuropsychiatric service, U. S. Naval Hospital, St. Albans, L. I., N. Y. Present address : Psychiatric Division, Bellevue Hospital, New York, N. Y. Opinions expressed herein are those of the author and do not necessarily reflect the views of the Navy Department or the Naval Service at large.

[2] Supplied as Tofranil through the courtesy of Geigy Pharmaceuticals.

[3] Supplied as Nardil through the courtesy of Warner-Chilcott Laboratories.

in doses of 15 mgs. t.i.d. was then added to the therapeutic regimen. The patient's condition nevertheless continued to deteriorate rapidly over the next 6 days, and because of the exigencies of his clinical status an alternative energizer, imipramine, was substituted for the phenelzine in 25 and then 50 mg. q.i.d. doses. The response to the latter was dramatic. Within two days his downhill course had been arrested (rapid action for imipramine, but by no means infrequently observed), and within 2 weeks his psychotic symptoms had disappeared entirely. The patient continued to receive imipramine for 5 additional weeks beyond the time he had reached what seemed to be his premorbid status. He was maintained subsequently on thyroxin alone and 2 weeks later was released from the hospital fully recovered. A 6 month follow-up report found the patient working steadily in civilian employment following honorable discharge from the service and getting along well on a maintenance dose of thyroxin.

Discussion

The failure of this disorder to respond to thyroxin alone places it among the group of post-thyroidectomy psychoses that are unmasked or precipitated by the surgery but are not caused strictly by the hypothyroidism. The patient's psychodynamics, as suggested by the delusional content and past history, and his relatively unremarkable physical status also imply reactive rather than endogenous etiologic factors, yet psychic energizers were employed nonetheless because it would be hard to discount endogenous factors altogether in the presence of demonstrated endocrinopathy. It is regrettable that clinical necessity dictated a switch in drugs 6 days after the commencement of therapy and confused the issue unavoidably in view of the well known time lag between the onset of medication and the remission of symptoms, but the almost immediate reversal of a progressively deteriorating course by a drug whose mode of action differs substantially from that of its predecessor presents a strong argument for the efficacy of the imipramine, rather than of the phenelzine. It would nonetheless be informative to try the latter again under suitable circumstances.[4]

[4] Bibliography on request.

"PLACEBO" (SIMULATION) ELECTROCONVULSIVE THERAPY

J. A. GUIDO, M.D., and J. JONES, M.D.[1]

The neurotic patient is seldom admitted to a state hospital facility unless, as in this case, the patient has no exact knowledge of his identity or place of residence. This report tends to emphasize the role of psychological factors which apparently were dominant in the therapeutic remission of psychogenic amnesia of events antedating admission to the hospital.

Present Illness: A 24-year-old, Caucasian, single, ectomorphic male was admitted with a history of retrograde amnesia, persistent and generalized cephalalgia, oscillopsia, and lethargy. A hyperthermia of 99° F. and EEG findings of "borderline diffuse slowing" suggested the presence of encephalitis; however, this was ruled out with a normal lumbar puncture and physical and neurological examinations. Hemogram, urinalysis, and PBI were all within the normal range. The MMPI, multiple drawings tests, sentence completion tests, Bender-Gestalt tests, Wechsler memory scale, and Rorschach tests concluded "the hysterical components which are usually found with individuals with a neurotic type of dissociative reaction seem to be absent in this individual."

Hospital Course: The patient was placed on a "secure ward" with an active treatment program and ECT, which he frequently requested. However, periodic psychotherapy associated with 8 amytal-methedrine interviews were undertaken over a period of 6 weeks without improvement. He voluntarily participated in the various ancillary therapy programs and at no time displayed psychotic ideation nor affective disturbances.

Since he had indicated a desire to receive ECT, it was felt that the presence of auto-suggestion as well as the influences of mass suggestion by other patients could be utilized therapeutically(1). He was "prepared" and in-

[1] Respectively, Senior Psychiatrist and Resident Psychiatrist, Metropolitan State Hospital, Norwalk, Calif.

cluded with other patients awaiting ECT, thrice weekly. The treatments were undertaken in a room where another patient would receive ECT subsequently. An intravenous injection of 20 mgm. of Anectine was administered, a bite was inserted, and after the disappearance of the "muscular fibrillations," a very slight current (15 volts, 5 milliamps) was applied bitemporally over a period of one second; a few seconds later, the electrodes were removed and positive-pressure oxygen was administered until respirations returned. He remained apparently quiet but not unconscious. Several minutes after the second patient received a treatment, he displayed thrashing, purposeless movements and, later, complained of cephalalgia, myalgia, "confusion," and of a "wobbly" gait.

He asked when his memory would return, and was definitely assured that it would return after his sixth treatment. With each "placebo ECT" he became progressively "confused" and "amnesic" for recent events. After the sixth treatment, he jubilantly proclaimed complete restoration of his memory. Following his ninth "placebo ECT," he refused to remain in the hospital for further psychiatric care; occasional telephone calls from the patient report he is gainfully employed.

Summary and Conclusions

Nine placebo electroconvulsive treatments produced a definitive symptomatic remission of psychogenic amnesia in a patient diagnosed as Dissociative Reaction.

The patient's closeness with the doctor, ward personnel, and ancillary therapies intensified the element of suggestibility and the "placebo effect"(2) of electroconvulsive treatment. This was apparent despite the exclusion of "hysterical components" by psychometric examinations.

At no time was the patient fearful or undesiring; as a matter of fact, he was overly willing and frequently requested electroconvulsive treatments. Unlike the use of simulation ECT in chronic schizophrenic patients, this report dismisses the utilization of fear and the loss of consciousness as important therapeutic factors(3, 4). This article also demonstrates the need for more extensive studies to encourage recognition of underlying "neurotic and hysterical factors" when describing the therapeusis of electroconvulsive treatments.

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CAMPTOCORMIA—A RARE CASE IN THE FEMALE

FREDERIC PAUL KOSBAB, M.D.[1]

Camptocormia, or the hysterical bent back, has so far not been reported in women. The syndrome was mentioned first in the literature by Brodie(1) in 1837 and later by several others during and after both World Wars when young soldiers employed this hysterical phenomenon to escape from hardships of military life and combat situations(2-6). In the French literature, cases of camptocormia in non-military personnel from industrial areas have been reported (7), but none in a female.

It therefore appears warranted to report the following case of camptocormia in a female patient:

A 28-year-old housewife, mother of 4, twice divorced and living in separation from her 3rd husband, entered the hospital in a stooped body posture, her back bent sharply from the hips in an angle of about 70 degrees. She complained in an angry and belligerent tone of voice that this painful "back condition" had now been present for 6 months, and before that on and off for 10 years, the single "spells" lasting from 1 day to several months. She had had numerous medical examinations, including X-rays, but the doctors had "failed to find anything organically wrong with her back"; however, she felt completely incapacitated and unable to take care of household and children.

The patient presented her grotesque posture at all times when walking around or standing but was able to straighten her back completely

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when placing herself in the recumbent position. This latter phenomenon, together with absence of any structural lesions, appeared diagnostic for camptocormia.

The patient, whose insistent and belligerent demands for further diagnostic measures and orthopedic procedures were ignored, was consistently and in a non-punitive manner told to "straighten up a bit every morning" (an approach which was already successfully employed by Hamlin(3)) ; she gave up her functional symptom completely after 2 weeks of hospitalization. Subsequent psychotherapy which was partly supportive, partly uncovering, revealed the patient to fall in the group of passive-aggressive personality trait disturbances of the aggressive type, which factor was mainly responsible for her difficulties and intense struggles in life, including 3 unsuccessful, combative marriages, a very hostile and ambivalent relationship with mother and sister, and an altogether very unsatisfactory domestic situation. Under the circumstances, it appeared obvious that the hysterical symptom of camptocormia had served as effective means to escape from the emotional consequences of a more and more unbearable life situation, with relief of anxiety representing the fundamental and primary gain.

Etiologically, no significant back injury was found or claimed. A car accident, some 10 years ago, was mentioned by the patient but not connected with the back syndrome. No other claims were ever made.

The outlook for this patient appeared guarded, although no relapse had occurred in the hospital, and after a total of 9 months of observation further follow-up was felt to be desirable.

The aforementioned case of camptocormia in a female is believed to be the first on record. The question why this functional syndrome, well known in males for over a century, has not been described in women before, appears of psychiatric interest and worth some further investigation.

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ENURESIS AND THYROTOXICOSIS : A BRIEF CASE REPORT

NORMAN SHER, M.D.[1]

Descriptions of the background and personality of the male enuretic(1) and thyrotoxic individual(2) have several features in common. The most notable of these are a hostile, rejecting mother figure in early life, subsequent identification with such a figure, and the persistence of passive, feminine personality traits. No reported cases were found in which these two disorders occurred together.

Case Report.—The patient is an 18-year-old white male first seen for nocturnal enuresis which started at age 15. Shortly before the onset of the enuresis his family had moved and bought a motel because the father had crippled his left hand and lost his job. The patient had been seen and treated by a local physician, but continued with his difficulty. At age 18 he enlisted in the Army. His enuresis persisted and he was seen by the GU clinic during basic training. No organic disease was noted. At his permanent assignment he was again referred to a medical facility and thence to the psychiatric service. He was a retiring, passive individual who felt he and his mother were alike, and who seemed preoccupied with the idea of "having to help" his mother. It was thought that his enuresis was on a psychogenic basis. He was followed for several months with water restriction, probanthine and supportive psycho-

[1] Manhattan State Hosp., Ward's Island, New York 35, N. Y.

therapy. His enuresis, however, persisted. At no point was any evidence of hyperthyroidism noted. He then was convicted of theft, and placed in the stockade. Two weeks later he complained of increasing nervousness and fatigue, and was noted to have a diffusely enlarged, non-nodular thyroid, a fine tremor and a pulse rate of 120. An I 131 uptake was 72% in 24 hours, a PBI 27 mg.% and a BMR plus 41. A diagnosis of diffuse, toxic goiter was made, with the suggestion that this be treated surgically after medical preparation. He was hospitalized, and treated with propythiouracil and later Tapazole. In two months his PBI had dropped to 9.5mg.% and his BMR to plus 5, but he was still judged to require further presurgical preparation. The patient continued with his enuresis while in the stockade and during the first week in the hospital, but after that had no difficulty.

Discussion

There are a number of interesting features to this case, among which are the late onset of the enuresis and the acting out (theft). Of major interest, however, is the relation of the enuresis to the thyrotoxicosis. Two possible explanations of this are :

1. The enuresis might be an early (and hitherto undescribed) sign of hyperthyroidism on physiologic grounds alone.

2. Both the enuresis and the thyrotoxicosis might represent different, interrelated psychophysiologic attempts in a given individual to cope with his life situation.

It seems unlikely that enuresis as a sign of early hyperthyroidism would not have been previously noted. This, along with the personality similarity in the (male) enuretic and thyrotoxic individual tend to support the latter hypothesis.

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HISTORICAL NOTES

HENRY M. HURD AND THE JOHNS HOPKINS "BIG FOUR"

JEROME M. SCHNECK, M.D.[1]

Henry M. Hurd was a man of great capability and with a distinguished career. Some of his accomplishments are remembered, but others were never widely known. Reluctantly, he prepared autobiographical information that appeared under the heading, "Some Random Recollections," as the last chapter in a biographical volume by his friend and admirer, the well known gynecologist Thomas S. Cullen(1). The book(2) with its personal reminiscences of Hurd has apparently received little attention. It is a small work, less than 150 pages, including a bibliography of Hurd contributed by Minnie Wright Blogg, Librarian at The Johns Hopkins Hospital. Cullen prepared his book at the request of members of the Hospital Board of Trustees. He had joined the hospital in 1891, encountered Hurd professionally, and became one of his friends. Later he wrote ". . . until now I have never had the slightest conception of the tremendous amount he has accomplished and of how largely he has been responsible for the phenomenal success of The Johns Hopkins Hospital"(2).

Hurd tells us he was born in Union City, Michigan, on May 3, 1843, the son of a physician, Dr. Theodore Canfield Hurd. His mother was Eleanor Eunice Hammond. His father is described as a man of energy, foresight, business acumen, and love for his profession. He was a graduate of Yale Medical School.

Henry Hurd's early years were spent on a farm near Union City. His father died in 1845. His mother married a younger brother of her deceased husband. This brother and another were also physicians. Still other relatives were of this profession. His stepfather was recalled as a kind man, interested in the education and development of his three stepchildren.

In 1854 the family moved to Galesburg, Illinois. There, at age 14, Hurd entered Knox College. For reasons of health and because of conflicts between rival factions for control of the college, Hurd remained at home for one year after having completed two years of study at the college. He taught at a country school. In 1861 he entered the third year at the University of Michigan in Ann Arbor and was graduated in 1863. He appreciated the change in school because contacts with teachers and students coming from distant places were more stimulating. Among the most stimulating influences was Andrew D. White who subsequently became President of Cornell University.

Hurd studied medicine under a preceptor, took a course of medical lectures at Rush Medical College in Chicago and another at the University of Michigan. He was graduated in medicine in March, 1866. Failing to gain entrance into the United States Navy on the ground of being a poor health risk, he was to say later, "I now recognize that this unkind verdict was probably one of the best pieces of good fortune I ever had"(1).

C. B. Burr, Hurd's successor at a later position in Pontiac, Michigan, tells us that Hurd's preceptor in his medical studies was his stepfather, and that after his graduation as a physician he did hospital work in New York where he studied also before moving to Chicago(3). There he was in general practice for two years.

In 1870 he was invited to serve as a medical officer in the State Hospital for the Insane at Kalamazoo, Michigan. E. H. Van Deusen was in charge. "I expected to remain during the summer only, but became so much interested in the work that I accepted a permanent appointment and remained in Kalamazoo eight years"(1). In 1878 he became assistant superintendent but left after a few weeks to take charge of the Eastern

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Michigan Hospital for the Insane at Pontiac. "This institution I opened, organized and conducted for 11 years, or until 1889"(1). Hurd became active in the Association of Medical Superintendents of American Institutions for the Insane (later the American Medico-Psychological Association and finally the American Psychiatric Association) (4). He served as Secretary (1893-1897) and President (1898-1899). He edited the *American Journal of Psychiatry* from 1897-1904. In his hospital work he opposed unnecessary restraint of patients, favored their employment, supported the cottage plan and was associated with all progressive developments. He was active in several medical organizations.

In 1889 he was appointed superintendent of The Johns Hopkins Hospital, which office he held until 1911, when he retired to become Secretary of the Board of Trustees. Burr tells us that Hurd hesitated to accept the Johns Hopkins appointment. It meant relinquishing his clinical psychiatric connections. He was strongly encouraged to accept(3). He had already started a new institution and now he had a similar opportunity. Cullen wrote, "In this institution he was destined to establish later the most harmonious relationship between the hospital and The Johns Hopkins Medical School which opened its doors in 1893. His wise council, his broad vista and his tact have in large measure been responsible for the continuous cordial and intimate relations that have always existed between the medical school and the hospital"(2). It has been stated that Hurd's abilities and his character are reflected especially well in the series of annual reports of the Hospital from 1889 to 1911. In his first report he mentioned the appointments of Osler, Welch, Kelly and Halsted. He stressed the services of Billings (a later professional collaborator(15), and President Gilman especially.

Hurd initiated *The Johns Hopkins Hospital Bulletin* and *The Johns Hopkins Hospital Reports*. He served as editor of both and many an article had to be reworked completely by him. He has been accorded much credit for their early success. His own writing continued with emphasis on medical education, nursing education, hospital management and psychiatry. One of Hurd's best known publications is his edited four volume *Institutional Care Of The Insane In The United States And Canada*(5). He alone wrote the first volume.

For a view of the man and his impression on others we turn to Cullen's colorful description :

> Dr. Hurd did not hold himself aloof from the house staff, but after the evening meal often dropped into the reading room to have a chat with the men congregated there. Every now and then an informal invitation came to dine with Dr. Hurd, Mrs. Hurd and his daughters. These were red letter occasions—events never to be forgotten.
>
> Every one of the men who was connected with the hospital during Dr. Hurd's time has a vivid recollection of that tall, slender figure passing silently down the corridors with his head bent slightly forward and apparently walking on air, his tread was so light. He rarely was content to mount the stairs one step at a time, he invariably went up two at a time with his arms outstretched as if he contemplated an aerial flight.
>
> Celebrated men who are closely associated with large numbers of young men are often given a special name as a mark of the esteem and affection in which they are held. When the men of the hospital staff of 20 years ago gather together and discuss old times they always refer to "Uncle Hank" with the warmest regard.
>
> The visitor to the hospital—the one who comes to stay a few weeks or months—while impressed by the good work done in the various departments and by the original articles published by the hospital is more impressed by the spirit of cooperation and good fellowship that exists in the hospital and medical school. Dr. Hurd and the "Big Four"—Drs. Osler, Halsted, Kelly and Welch—have in large measure been responsible for this delightful atmosphere.
>
> Many of the senior members of the hospital staff have been geniuses and it is a well-known fact that geniuses frequently become so engrossed in their individual subject that they are temporarily totally oblivious to the fact that other people have to be considered and that these people have precisely the same rights and privileges as they. A tactful, gentle, but firm tug emanating from the superintendent's office would awaken such an individual from his revery. It was this absolute fairness on the part of Dr. Hurd that won for him the confidence and affection of the senior staff. They

knew that they would always get a square deal(2).

Hurd had been carrying the entire responsibility for editing the hospital publications. On Jan. 9, 1899 Osler wrote to him suggesting that "there should be an Editorial Committee composed of you and Mall, and Abel, and Howell and a couple of the younger men, with Smith as Secretary to do the proof-reading and to relieve you of all the worry of it"(6).

Dr. Hurd's increasingly burdensome activities, however, probably did not account for the impression of a "crotchety exterior" that some persons observed. They never detracted from his helpfulness. Heuer recalled, "He did many kind deeds for young men about the hospital, few of which even became known. A rather forbidding man because of his caustic tongue, he had a keen sense of humor"(7). Hugh Young told of Hurd receiving letters from prominent physicians for aid in retrieving manuscripts that Welch permitted to accumulate without reply(8). In addition to other tasks, Hurd would hunt through Welch's collections, during his absence, to find and return the missing items. Amongst these observations are others which pictured him as often cautious and non-committal in letters and transactions(9).

It was probably no accident that Cushing, telling of the youth of Osler, Welch, Halsted and Kelly at the time of their Hopkins appointments included Hurd too(6). And Welch's biographer, describing the "Big Four," added,

> President Gilman himself undertook to find the last of the men absolutely necessary for the functioning of a hospital, the superintendent, and chose the head of an insane asylum in Pontiac, Michigan, Henry Hurd . . . Hurd at Johns Hopkins proved to be the ablest hospital superintendent of his time in America (10).

Hurd was linked directly with the Big Four also by Lewellys Barker(11). Yet there were other men of great merit in the early years of the hospital and medical school. Mall is one example(12). Hurd alone seems consistently to be accorded this fifth position. It is of interest too that Hurd shared the historical perspectives of his colleagues and was especially concerned with early data about The Johns Hopkins Hospital (13).

To raise the question whether the "Big Four" reference should be more suitably the "Big Five" may appear to be stretching a point. The fact is that Kelly, according to his recent biographer, "always insisted that Hurd was as much one of the founders of the School of Medicine as were the original four department heads"(14). This precise statement is amply supported by an assertion of Cullen :

> I have always felt that Hurd should have been included in Sargent's portrait group of the "Big Four." It should have been five. In his life Dr. Hurd did as much for Johns Hopkins as any of the four and it might easily be shown that he did as much for them as he did for Hopkins.
>
> Welch and Osler and Halsted and Kelly would never have had the reputations they made, except for Hurd. He founded the Hopkins Hospital Bulletin before there was a medical school and he started the Hopkins Reports and edited both for years. The four others recognized in theory that they should record what they were doing and finding out ; but it was Hurd who made them do it. He kept after them all the time to write up their experimental work and their interesting cases, their clinical observations and laboratory findings, for the Bulletin first and then for the Reports ; never let them rest until they had done it.
>
> And that more than anything else, as they all recognized was what made Hopkins' name, and theirs. Especially in Europe. Hopkins Bulletins were known in the European clinics before the hospital had been going three years. So, thanks to Hurd, were the names of the "Big Four." Like most men who do things, they got their satisfaction in doing them. It was Hurd who made them write and made them famous (16).

Some aspects of Hurd's work and personality have been mentioned briefly, and the idea of a "Big Five" has been suggested by documentation and implication. But there is more to the essence and importance of his contributions. His activities, writings, personal associations and the full impact of his efforts must await another report.

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THE FIRST ELECTROCONVULSIVE TREATMENT GIVEN IN THE UNITED STATES

SYDNEY E. PULVER, M.D.[1]

The readmission of the first person treated with electroconvulsive therapy at the Institute of the Pennsylvania Hospital provided the stimulus for this brief note on the introduction of electroconvulsive therapy to the United States.

As far as I can determine, the first treatment in the United States was given by Dr. Victor A. Gonda. It is best described in the words of his son :

In midsummer of 1939, dad was in communication with Cerletti and in November of that year he received delivery of an Italian machine (including a separate ohm-meter) made by G. Zurli and Dr. A. DeRegibus in Genoa, Italy. For the first two months dad did not begin treatments, while in his cautious and methodical manner he tested out the apparatus on experimental animals (producing convulsions). I recall vividly also, just before Christmas of 1939, his placing the electrodes on his own thigh, experiencing a violent contraction of his muscles and injuring his leg which hit the table. Subsequently, he was concerned about the possible pain patients might experience were they not immediately rendered unconscious. This delayed his giving of the first treatment until late January of 1940 at the Parkway Sanitarium in Chicago. I recall the anxieties and the tensions experienced with the giving of the first few treatments, having accompanied my father to the Sanitarium on those occasions. By May of 1940, dad had treated several patients and had learned many nuances relative to the treatment.

The first treatment mentioned above was given some time before January 20, 1940. Shortly thereafter, on February 6, 1940, Doctors David J. Impastato and Renato J. Almansi treated their first patient at Columbus Hospital, New York City, using a machine brought by Almansi from Italy.

Meanwhile, interest was aroused, and American machines were being constructed. Using a machine constructed by Mr. Franklin Offner of Chicago, Dr. Douglas Goldman treated his first patient on April 23, 1940 at Longview State Hospital, Ohio. An earlier American machine, designed by Dr. Joseph Hughes, was constructed by Mr. Fritz Schindler at the Institute of the Pennsylvania Hospital. Construction was finished late in 1939, and a series of cats and monkeys were treated and later studied for cerebral damage. The first human treatment with this machine was administered by Dr.

[1] Institute of the Pennsylvania Hospital, Philadelphia, Pa.

Hughes and Dr. Lauren H. Smith on May 1, 1940. The subsequent history of this patient is interesting. At the time of her first treatment she was 50 years old and had been hospitalized for 4 years with "intractable" involutional depression. Twelve Metrazol convulsions had previously been ineffective. Treatment on May 1 was subconvulsive; and it was not until the fifth treatment on May 17 that a convulsion was produced. After 23 treatments in the next several months, she showed no signs of depression, and was discharged in 1941. She remained well for 18 years! In 1957 she was hospitalized with a second depression, which required 9 treatments to effect a remission. Although the original machine still resides at the Institute, sentiment did not prevail and she was treated with a more modern apparatus.

COMMENTS

A NATIONAL INSTITUTE OF SOCIAL AND BEHAVIORAL PATHOLOGY

Our discussion of research areas in the common frontiers of psychiatry and law(1, 2) far from exhaustive though it is, has nevertheless indicated how vast the field of psychiatry and the law is now perceived to be. The map of common problems of social and behavioral pathology has unfolded gradually through the years. In our view the moment is opportune to provide a national center of investigation designed to provide a continuing stream of initiative, an integrating focus, and a place of work entirely devoted to the study of social and behavioral pathology.

Such an institute should be geographically inclusive in the sense that it should take intellectual responsibility for examining the problems in the national context. It will naturally assume some special responsibility for the locality where it may be situated. Preoccupation with national trends and potential developments would not blind the Institute's investigators to the world context, and to the importance of comparative research studies which seek the significant phenomena regardless of political boundaries. A National Institute of Social and Behavioral Pathology would be a natural participant in the work of similar establishments at every level—personal, local, national, international.

A broad responsibility of the Institute would be to aid in the clarification of national achievement objectives in the fields of law and mental health. It would undoubtedly operate within the fundamental assumptions of human dignity which are incorporated in the aspirations of American society and partially articulated in such instruments as the Universal Declaration of Human Rights. Goal clarification calls for the presentation of long-range, middle-range, and more immediate objectives.

The clarification of goal called for above must be conducted in the light of dependable information about the remote and recent past, and the projection of the future. Since existing machinery for the obtaining of essential statistics is wholly inadequate, one prime task of the Institute would be to set up procedures for the collection, evaluation and publication of needed information concerning the incidence and prevalence of various forms of crime and alleged crime, their disposition by the social, police, prosecutory, judging and incarcerating agencies, including probation and parole. Hopefully these initiatives would lead to the development and dissemination of more psychologically illuminating data.

The core of the Institute's work, as indicated throughout our papers, is the discovery and verification of social and behavioral hypotheses that explain the individual and social dislocations that concern us. Thinking nationally, it is evident that the varied circumstances among the several States permit us to design experiments in nature—using States as "control" for each other, comparing by field studies factors—demographic, economic, ethnic, for instance—that predispose to high rates of crime in some areas and to greater conformity in others. Investigative methods would be in no wise restricted to this pattern, of course. As our review of promising lines of attack has suggested, there is room for much versatility which it will be one of the principal aims of the Institute to encourage. It is of fundamental importance to provide a hospitable environment for the pursuit of every promising lead, and to guard against the domination of inquiry by advocates of any one set of factors, whether economic, political or professional.

Besides the broad definition of the overriding objectives of American society the problem will be to study a limited array of socio-legal possibilities in terms that bring out the social costs as well as the probable gains of following a particular sequence of change. In terms of culture, social class,

interest group, and personality form these costs (and gains) need to be brought into the clear light of rational assessment.

In a word we are affirming that the many common frontiers of psychiatry and law involving social and behavioral pathology now justify a national effort at joint exploration, settlement, and incorporation into the fraternity of organized intellectual states.

Lawrence Zelic Freedman, M.D.
Harold D. Lasswell, Ph.D.

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CORRESPONDENCE

SENSORY DEPRIVATION

Editor, THE AMERICAN JOURNAL OF PSYCHIATRY :

SIR : Referring to the letter of Jack Arbit, PH.D., in the November 1960 issue which gives important information about early research on the subject of sensory deprivation, quoting other research in the same area recently published in the APA Journal, may I point out that some of the work which was done during the war in Switzerland has not been quoted by any author in your journal.

Your readers may be interested to know the results of the research which I published in *Schweizerische Zeitschrift fur Psychologie,* 1948 Band VII. Heft 1, Verlag Hans Huber, Bern, entitled *Die Psychologie der isolierten Gruppe.* The observations were made in Swiss labor camps during World War II for refugees and aliens who lost their passports because their countries of origin were invaded, and also in remote Swiss mountain areas and state hospitals.

It is to my knowledge the only psychological treatise commended by Dr. Albert Einstein, who in a letter to me made an interesting comparison between the psychological phenomena I observed and certain electrical physical phenomena.

Ben A. Finkelstein, M.D.
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Lexington, Ky.

TREATMENT IN TRANSVESTISM

Editor, THE AMERICAN JOURNAL OF PSYCHIATRY :

SIR : In the September, 1960 issue of your *Journal,* Dr. Veronica M. Pennington in the paper "Treatment in Transvestism" describes a successful outcome in the treatment of a 31-year-old transvestite. It is concluded : "Transvestism is perverted behavior which has been corrected chemically by the phrenotropic agents nialamide, chlorpromazine, and meprobamate. . . ."

This case report calls to mind a 40-year-old divorced man who consulted me as an outpatient in July 1956 with a chief complaint of transvestism since age 12. He was seen in 4 sessions of psychotherapy. During the last session he announced his intention to marry again the following September.

He consulted me again in July 1960 because of trouble in being assertive in his marriage, both with his wife and teen-age stepson. Tranvestism was not a symptom nor had it been in the intervening years.

The effective agents in psychiatric interventions are difficult to specify.

Robert D. Gillman, M. D.,
Washington, D. C.

ORDINAL POSITION

Editor, THE AMERICAN JOURNAL OF PSYCHIATRY :

SIR : Dr. Hanus J. Grosz' comment on the supposed lack of significance of ordinal position in the family (Am. J. Psychiat., 117 : 165, 1960) omits consideration of one of the most important papers on the subject, McArthur's "Personalities of First and Second Children (Psychiatry, 19 : 47, 1956). This paper seems to have appeared too late to be included in the 1956 reviews by Koch which Dr. Grosz quoted.

The McArthur paper, based on a three generation study of normals, suggests that "the first child in a family is more commonly adult-oriented, while the second child is

more likely to be peer-oriented." It also indicates that "of the various traits that arise from first-born and second-born orientations, sensitive seriousness in the first and easy-going friendliness in the second seem best documented."

The McArthur study appears to be both thorough and accurate, and apparently in accord with much clinical experience. The reason for McArthur's findings might be found by viewing the family as a hierarchical structure (N. S. Lehrman: "The Family: a Biosocial Hierarchy; How Democracy Begins at Home," paper read before the A.A.A.S., Dec. 1959). In this hierarchy, particular importance for any one individual can be seen as resting on the person next above him. The mother will usually be next above the adult-oriented oldest child, while an older sibling will tend to be next above the peer-oriented younger sibling.

Nathaniel S. Lehrman, M.D.,
Great Neck, N. Y.

REPLY TO FOREGOING

Editor, THE AMERICAN JOURNAL OF PSYCHIATRY:

SIR: A review of the literature on the significance of ordinal position in the family does not support the claim that this factor can be singled out as a determinant of specific personality traits. In individual instances in which ordinal position appears to be of importance its meaning differs greatly from one person to another and from one intrafamilial setting to another.

In regard to the McArthur study, quite apart from its own merits, one cannot help but question the pertinence of his conclusions to the significance of ordinal position in general. The participants in his study were drawn from a group of volunteers at Harvard University and as McArthur himself remarks, "It is possible, of course, that the phenomena reported are peculiar to the Harvard Scene." This impression is further reinforced by McArthur's observation that even within this highly selected population sample "among the private-school boys . . . 44% of the first-born were classified in complete agreement with first child theory, while only 25% of the public-school first borns were so typical."

There are other equally obvious biases which have gone into the McArthur study which cannot be discussed in this brief answer to Doctor Lehrman's letter. At any rate, it hardly seems warranted to alter one's conclusions which are drawn from the literature as a whole, on the basis of this study.

Hanus J. Grosz, M.D.,
Albert Einstein College of Medicine,
Yeshiva University.

IN MEMORIAM

ROBERT BUSH McGRAW

1896-1960

Robert Bush McGraw, Professor of Clinical Psychiatry of the College of Physicians and Surgeons of Columbia University, died at the Harkness Pavilion of the Presbyterian Hospital in New York City on October 2, 1960, at the age of 64.

He was born in Cortland, N. Y., on November 16, 1896. He came from a family of whom many were good doctors, including his maternal grandfather who served his community for a half century. Dr. McGraw's early education was in McGraw, a small village near Cortland. When he was 14 his family moved to England and there he attended the Boys' Grammar School at Hitchin, Hertfordshire, later completing his secondary education at the Finsbury Technical College in London, England. In 1914 at the age of 18, he entered Cornell University for his undergraduate years and continued in the same school for his medical training, receiving his Bachelor's degree in 1918 and his M.D. in 1921. During his school years he had many interesting positions in hospitals and spent one summer in the office of his uncle who was a medical practitioner.

After graduating from medical school and before entering upon his internship on the Second Medical Service at Bellevue Hospital, he spent a 6 months' period as medical intern at the New York Hospital, Westchester Division, at that time Bloomingdale Hospital, and was assistant physician there from January 16, 1924 to June 3, 1925.

Dr. McGraw became Instructor in Psychiatry at the College of Physicians and Surgeons, and Clinical Assistant at Vanderbilt Clinic in 1924, and between 1925 and 1927 was closely associated with Thomas W. Salmon, the Professor of Psychiatry at Columbia. About the same time he joined George Draper's Constitutional Clinic and collaborated with him in the formulation of one of Dr. Draper's 4 panels, the psychiatric panel, and in the investigation of peptic ulcer and other psychosomatic problems. Dr. McGraw's rise in the Department of Psychiatry was rapid. He assisted Dr. Salmon in plans for The Medical Center then moving to Washington Heights and was made Chief of the new Outpatient Department and Clinical Professor of Psychiatry in 1928.

One of Dr. McGraw's chief duties as head of the Psychiatric Outpatient Department was the organization of the teaching of the third year clinical clerks. He also established a Children's Psychiatry Department as part of the service. Dr. McGraw gave a great deal of time and enthusiasm to his teaching and was one of the first to advocate visits by clinical clerks in psychiatry to the homes of their patients, a practice later incorporated into comprehensive care at other medical centers. He organized the first psychiatric consultation service for the Presbyterian Hospital and at his death was Attending Psychiatrist there. In World War I as a student at Cornell, Dr. McGraw was a member of the Student Army Training Corps.

During World War II he was a Senior Consultant for the Veterans' Administration and did much to arrange for the screening and treatment of veterans needing psychotherapy. He also helped to organize a psychiatric clinic for the Home Service Department of the American Red Cross.

In 1944 and 1945 Dr. McGraw administered a training program for Army doctors at the Vanderbilt Clinic. This consisted of three twelve-week periods of training and clinical instruction in the Fundamentals of Neuropsychiatry for a total of 150 officers.

In addition to teaching and lecturing at Columbia he came to grips with many practical problems of his day. Before the formation of the American Board of Psychiatry and Neurology he published a paper in the *Journal of Nervous and Mental Disease,*

February 1931, "Are Neurology and Psychiatry Separate Medical Entities?" He said, "I think we must recognize the fact that the public is choosing psychiatrists under that label more and more; and, further, that they are beginning to understand that a psychiatrist means a physician, medically trained, and not simply psychologically and pedagogically trained. A neurologist should be extremely well trained in neuroanatomy and perhaps the notion should be expressed that a man might be both neurologist and psychiatrist but could be either." He was interested in problems of hypochondriasis, insomnia, and recoverable mental disturbance of the aged. He also addressed himself to the serious problems of medical and psychiatric indications for abortion and alerted all of us to the importance of knowing the law of the land and time. He made very worthwhile contributions to the *American Handbook of Psychiatry*. In his teaching and practice he was interested in all forms of treatment which brought the psychiatrist's skills to the greatest number of patients.

Dr. McGraw was chairman or president of most of the important New York psychiatric societies. His philosophical, historical and literary contributions at the Vidonian Club, which he loved, will be long remembered. To all associated with him in school, hospital and the community he was the ideal of a good doctor, friend and humanitarian.

As a member of the Madison Avenue Presbyterian Church, he took interest in adding to the membership's information regarding medical and psychiatric subjects and assisted in setting up standards for selection of missionary personnel for the Presbyterian Church. In recognition of this service he received a citation on the 29th Anniversary of the Missionary Society's Medical Department. He was active in the State Mental Hygiene Commission of the State Charities Aid Association, a member of the Council on Widows and Orphans and a member of a committee to study the care and education of epileptic children in public schools and homes under the Board of Education of the City of New York. Dr. McGraw was also a member of the Advisory Qualifying Committee of the Workmen's Compensation Board of the New York Academy of Medicine and member of its Committee on Medical Information.

Dr. McGraw married Catherine Ruth Ross on January 2, 1924. Besides his wife, he is survived by a daughter, Anne Barbara McGraw, and a son, Robert Bush McGraw, and 3 grandchildren.

James H. Wall, M.D.

NEWS AND NOTES

Dr. David Rapaport.—At the early age of 49 occurred the death, December 14, 1960, of Dr. Rapaport, psychologist of the Austin Riggs Foundation at Stockbridge, Mass.

Dr. Rapaport was born in Hungary and received the degree of Ph.D. in psychology from the University of Budapest.

Coming to the United States in 1938, he joined the staff of the Osawatomie (Kansas) State Hospital, going later to the Menninger Clinic at Topeka as chief psychologist, where he became the director of research.

Since 1948 he had been a member of the Austin Riggs Foundation as research associate in charge of psychology and director of psychological testing methods, as described in his *Manual of Diagnostic Psychological Testing*.

Rapaport's most ambitious publication is his *Organization and Pathology of Thought*, published in 1951 by the Columbia University Press. This huge volume represents an enormous amount of work, including the selection and translation of 27 major contributions in the German and French literature, many not readily accessible to English readers, and supplying as well extensive running commentaries throughout. In an ample concluding chapter Rapaport seeks to integrate the texts of the various authors and adds relevant more recent data. The keynote he followed in this work was the statement in the first line of his Preface: "The knowledge that thinking has conquered for humanity is vast, yet our knowledge of thinking is scant."

American Psychosomatic Society.—The Society's 18th annual meeting will be held at Chalfonte-Haddon Hall, Atlantic City, April 28 to 30, 1961. The meeting will begin Friday evening, April 28, at 8:30 o'clock.

Registration is Friday afternoon from 3:00 to 5:00 and from 7:00 p.m. The registration fee for non-members of the Society is $5.00. Students, interns, residents, and fellows, $1.00 and presentation of proper identification.

The American Board of Psychiatry and Neurology.—The Board will hold 3 examinations in 1961: March 20 and 21—New Orleans, La.; October 9 and 10—Chicago, Ill.; and December 11 and 12—New York, N. Y.

Effective January 1, 1962, the following fee schedule will be adopted: application fee, $75.00; examination fee, $100.00; re-examination fee (complete re-examination), $100.00; re-examination fee (1 or 2 subjects), $75.00.

Dr. Walter Woodward.—One of the leading exponents and practitioners of occupational psychiatry in the United States, Dr. Walter D. Woodward, consulting psychiatrist to the American Cyanamid Company, died Oct. 8, 1960, at the age of 44.

A graduate in Arts from the University of Michigan, Dr. Woodward received his M.D. degree from the University of Virginia in 1943. He took graduate work in psychiatry at the U.S.P.H.S. Hospital on Staten Island and at New York Hospital. He became a member of the medical staff of the American Cyanamid Co. in 1947 and continued in that position until his death.

As exemplar, planner and teacher of psychiatry in industry, particularly in its preventive aspects, Dr. Woodward had created for himself an enviable career. The value of his leadership was widely recognized.

Second International Conference of Human Genetics.—This Conference will be held in Rome, Italy, September 7-12, 1961.

The 7th International Congress of Neurology will be held in Rome at the same time and a joint session between the two bodies will be arranged.

The Genetics Conference will be held in the Conference Building of the Food and Agriculture Organization of the United Nations. Professor Luigi Gedda is chairman of the organizing committee.

Registration fees: full membership, including proceedings, $30.00; without proceedings, $15.00; associate membership, $10.00.

Following the Conference an official tour

will be arranged to Naples, Sorrento, Amalfi, Salerno and Paestum.

THE YALE CENTER OF ALCOHOL STUDIES AND LABORATORY OF APPLIED BIODYNAMICS. —The Center regretfully announces the decision of the University that, valuable as the work of the department has been for the past 40 years and promises to be in the future, its continuation as a part of Yale University is inappropriate.

The major reasons for this decision are: the diversity of academic disciplines represented in the Center's research program, and the applied rather than purely academic nature of some of its responsibilities and activities, make it difficult to locate the organization in any of the traditional departments at Yale under its current educational policy; furthermore, the University cannot increase its contribution to the necessarily expanding financial needs of this program.

The Yale Corporation has pledged continued support to the Center for a reasonable period to allow, first, completion of current research programs and, second, development of steps to facilitate in a setting other than Yale the orderly continuation of its documentation, publication, educational and other activities.

The projected 19th annual session of the Summer School of Alcohol Studies, and the Alumni Institute already announced to its 3,300 graduates, both scheduled for July 1961, are to be held at Yale University as planned.

ARBEITEN AUS DER DEUTSCHEN FORSCHUNGSANSTALT FUR PSYCHIATRIE IN MUNCHEN. —22nd ed. Max-Planck-Institut. (Berlin, Gottingen, Heidelberg: Springer—Verlag, 1960. No price quoted.)

This weighty volume is an assemblage of 53 papers by 28 authors emanating from the Max-Planck-Institut and representing recent work at this Center.

The whole range of neurological, psychological and psychiatric subjects is represented in this volume, in which the actual offprints have simply been bound together.

NURSES ATTEND APA INSTITUTE.—Psychiatric and mental health nursing consultants met in Sale Lake City on October 16, 1960, the day before the Mental Hospitals Institute of the American Psychiatric Association, to discuss programs in their states and regions. Margaret L. Cavey, psychiatric nursing consultant, chaired the meeting. Among the topics discussed were: the changing role of nursing personnel in the open hospital; psychiatric units in general hospitals; care of the aged in nursing homes and the role of the LPN in psychiatric hospitals.

5TH CONGRESS OF LEGAL MEDICINE AND OF SOCIAL MEDICINE.—This Congress will be held in Vienna, May 22-27, 1961. Professor Dr. Leopold Breitenecker, Director of the Institute of Legal Medicine, University of Vienna, is President. All aspects of forensic medicine will be represented.

Further information is available from the Secretariat of the 5th Congress of the International Academy of Legal Medicine and of Social Medicine, Vienna 1X, Sensengasse 2, Austria.

THE MENNINGER FOUNDATION.—Dr. S. I. Hayakawa, internationally noted semanticist, has been appointed an Alfred P. Sloan Visiting Professor in the Menninger School of Psychiatry at Topeka, Kansas. He will serve for about three months from mid-January 1961.

Dr. Hayakawa is professor of language arts at San Francisco (Calif.) State College and is editor of *ETC.*, a quarterly review of general semantics published by the International Society for General Semantics. He has held visiting professorships at Columbia University Teachers College, the University of Notre Dame, and the University of Hawaii.

In 1959 he was awarded the Claude Bernard Medal for Experimental Medicine and Surgery by the University of Montreal, the only non-physician to have been so honored.

AMERICAN ORTHOPSYCHIATRIC ASSOCIATION.—The 38th annual meeting of the American Orthopsychiatric Association will be held at the Hotel Statler-Hilton, New York City, March 22-25, 1961. William S. Langford, M.D., professor of psychiatry at

Columbia University will deliver the presidential address on adaptation of the child in the pediatric hospital to illness and hospitalization. René Dubos, Ph.D., professor at the Rockefeller Institute, will also speak on problems of biological adaptations of children to modern society.

Further information is available from Marion F. Langer, Ph.D., American Orthopsychiatric Association, 1790 Broadway, New York 19, N. Y.

Animal Study in Public Schools.—The National Society for Medical Research reports: Five states—Illinois, Maine, Massachusetts, Oklahoma and Washington have laws to prohibit all or nearly all study of animals in public schools, while Pennsylvania has a wise law prohibiting only *cruel* experiments.

The perennially busy Antivivisectionists seek to extend the ban to all animal studies and have contacted local school authorities to that end, in many cases even securing pledges that no more studies involving live animals will be allowed.

As the Society for Medical Research points out, no science is well taught unless the real subject matter is studied directly, and that the study of animals is basic to education in biology and should be limited only by reasonable humane restrictions.

Award to Dr. Nolan Lewis.—The first Emil Gutheil, M.D. Memorial Medal for Outstanding Contributions to Psychotherapy was awarded to Nolan D. C. Lewis, M.D. by the Association for the Advancement of Psychotherapy on Oct. 30, 1960.

At the Memorial Conference Dr. Lewis gave a conservative and comprehensive discussion of the future of psychotherapy, in which he urged the adoption of higher professional standards and more scientific methods in the application of this method of treatment, and the avoidance of sectarianism—he stressed the common denominator that must underlie all forms of psychotherapy, and the importance of suggestion inherent in the doctor-patient relationship.

Psychiatrists and Military Service.—It is now possible for physically professionally trained qualified psychiatrists to meet their military obligations while assigned to the staff of Saint Elizabeths Hospital.

For further information and application forms write Dr. Winfred Overholser, Saint Elizabeths Hospital, Washington 20, D. C.

Soviet Contract with N. Y. Scientific Publisher.—Consultants Bureau, publishing house in New York, has, from 1946, pioneered cover-to-cover translation of Soviet scientific journals. By 1955, five Soviet scientific journals were being published by the company. The following year, the company entered into contracts with the American Institute of Physics and the American Institute of Biological Sciences to provide translation of 5 additional Russian scientific journals.

In June 1960, a contract covering the complete translation into English of 23 major Soviet scientific and technical journals was renewed with Mezhdunarodnaya Kniga, the official Soviet international book agency.

In Moscow a new contract establishing terms for exclusive English language rights to Soviet scientific books for the next 6 years was signed by Consultants Bureau and Mezhdunarodnaya Kniga, October 1960. All books published by Consultants Bureau will in future be made available to English-speaking scientists within 6 months of their publication in the U.S.S.R. Where the importance of Soviet conferences warrants speedier dissemination of their proceedings, English translations will be published at the same time as the Russian originals appear. Every book chosen for translation into English will have the recommendation of both Soviet and American scientists as being an outstanding contribution to the existing literature on the subject.

Dr. Kety Heads Psychiatry at Johns Hopkins.—Dr. Milton S. Eisenhower, president of Johns Hopkins University, and Dr. Russell A. Nelson, director of the Johns Hopkins Hospital, have jointly announced the appointment of Dr. Seymour S. Kety as professor and head of the department of psychiatry at the Johns Hopkins University School of Medicine and psychiatrist-in-chief

of the Johns Hopkins Hospital. Dr. Kety succeeds Dr. John C. Whitehorn who retired June 30, 1960.

A graduate in medicine from the University of Pennsylvania, Dr. Kety joined the department of pharmacology at that University in 1943 and in 1948 became professor of clinical physiology in the graduate school of medicine. Since 1951 he has been associated with the National Institutes of Mental Health and Neurological Diseases and Blindness at Bethesda, Md. Since 1956 he has been chief of the laboratory of clinical science of the National Institute of Mental Health.

The Johns Hopkins University is fortunate in securing the services of this distinguished research scientist.

Mental Hospital Institute for Community Physicians, Maryland.—Family physicians across the State are invited to attend Maryland's first Mental Hospital Institute for Community Physicians to be held Mar. 1 to Apr. 5, at Spring Grove State Hospital in Catonsville.

The Institute will be held on 5 successive Wednesdays from 2 to 5 p.m. under the joint auspices of Spring Grove, the Maryland Academy of General Practice, the Psychiatric Institute of the University Hospital of Maryland, and the Baltimore Psychoanalytic Institute. Dr. Bruno Radaukas, Superintendent of the Hospital is Chairman of the Planning Committee.

Further information may be obtained from Dr. Radaukas at the Spring Grove State Hospital, Catonsville, Md. Registration will be limited to the first 50 applicants.

Dr. Anthony Joins Chicago Institute for Psychoanalysis.—E. James Anthony, M.D., of St. Louis, Mo., graduate of King's College, London, and a former Nuffield Fellow in Child Development at the University of Geneva, where he worked with Dr. Piaget, has been appointed to the faculty of the Chicago Institute for Psychoanalysis.

Dr. Anthony came to the United States in 1958 as Ittleson Professor of Child Psychiatry at the Washington University in St. Louis, and has been serving as head of Child Psychiatry at the Jewish Hospital in that city.

Annual Institute in Psychiatry and Neurology, Little Rock, Ark.—The Thirteenth Annual Institute in Psychiatry and Neurology will be held on March 2 and 3, 1961, at the North Little Rock Division of the Consolidated Veterans Administration Hospital, Little Rock, Ark. There will be three related conferences on March 1 on Clinical Psychology, Psychiatric Social Work, and Psychiatric Nursing.

There is a dinner meeting planned for Thursday evening, March 2, with Dr. Robert H. Felix, President of the American Psychiatric Association, as guest speaker.

Further information may be obtained from Dr. H. W. Sterling, Manager, Veterans Administration Consolidated Hospital, Little Rock, Ark.

Thirty-Eighth Annual Meeting of the American Orthopsychiatric Association.—This meeting will be held from March 23 to 25, 1961, at the Statler Hilton Hotel in New York City.

By arrangement with the Professional Placement Center of the New York State Employment Service, placement services will be provided during the annual meeting. The Placement Area will be on the Exposition Floor of the Statler Hilton Hotel.

Advance registration is required by everyone including members of the American Orthopsychiatric Association. Registration fee for non-members is $9 for 3 days; $4 for a single day. Pre-registration in workshop(s) and/or panel(s) is also required. For registration and further information write: Executive Secretary, American Orthopsychiatric Association, 1790 Broadway, New York 19, N. Y.

Training Program at the Silver Hill Foundation.—This is a 3-year training program carried on in cooperation with the Columbia-Presbyterian Medical Center in New York. The first year of training is spent at that Medical Center and the second and third years at the Silver Hill Foundation in New Canaan, Conn. At present only 2 or 3 residents are accepted annually for training.

All stipends are without maintenance; the stipend for first year residents is $4,000 per year, for second year residents $7,000 and for third year residents $8,000.

For further information write: Dr. William B. Terhune, Medical Director, Silver Hill Foundation, Valley Road, New Canaan, Conn.

Two Workshop Seminars in the Rorsach Test.—The Department of Psychology at the University of Chicago is offering 2 workshop seminars in the Rorsach Test.

The first, June 19-23, 1961, will be about the foundations of the test. The second, June 26-30, will discuss advanced clinical interpretation. Dr. J. S. Beck will conduct both seminars.

For information write to: Rorsach Workshops, Department of Psychology, University of Chicago, Chicago 37, Ill.

Psychotherapy Week at Lindau (Bodensee).—Under the direction of Dr. Helmuth Stolze, this training period is from May 1-6, 1961, followed by a second week, May 8-13, for practical experience. This training program is sponsored by the Medical Society for Psychotherapy in Lindau.

Further information may be obtained from The Secretariat of the Lindau Psychotherapy Week, Dienerstrasse 17, München 2, Germany.

James N. Burrows Appointed Director of Institute for Crippled and Disabled.—Mr. Burrows, who received an M.A. degree from Miami University, Oxford, Ohio and a B.Sc. degree from the University of Cincinnati, has been appointed Director of the Institute for the Crippled and Disabled, 23rd St. at 1st Ave., New York City. For the past 20 years Mr. Burrows has been engaged in the management and administration of government and private rehabilitation and medical programs.

Psychiatric Education for General Medical Practitioners.—To meet a growing demand from physicians in the field of general medicine for instruction in dealing with psychiatric problems encountered in their regular work, a plan to meet the situation in New York State is being developed jointly by the Department of Mental Hygiene, and the New York State branches of the American Psychiatric Association with the cooperation of the New York State Medical Society.

It is presumed that the proposed courses will be so organized as to receive approval for Category 1 credit by the American Academy of General Practice.

The American Board of Psychiatry and Neurology, Inc.—The following were certified in Child Psychiatry in December, 1960:

Ackerly, S. Spafford, M.D., Louisville, Ky.
Chamberlain, Herbert E., A.B., M.D., Sacramento, Cal.
Dawes, Lydia Gibson, B.S., M.D., Cambridge, Mass.
Drewry, Henry Harris, B.S., M.D., D.Med.Sc., Woodside, Queens, N. Y.
Farrell, Malcolm Joseph, B.S., M.D., Waverley, Mass.
Fries, Margaret E., M.D., New York, N. Y.
Kessler, Edwin S., M.D., Washington, D. C.
Kestenberg, Judith S., M.D., New York, N. Y.
Koff, Robert, M.D., Chicago, Ill.
Little, Harry Morrow, M.D., Houston, Tex.
Martin, Katharine Hawley, M.D., M.P.H., Watertown, Conn.
Rich, Gilbert Joseph, Ph.D., M.D., Roanoke, Va.
Schroeder, Paul L., B.S., M.D., Atlanta, Ga.
Simson, Clyde B., M.D., Detroit, Mich.
Solomon, Joseph C., A.B., M.D., San Francisco, Cal.
Sperling, Melitta, M.D., New York, N. Y.
Staples, Herman D., M.D., Media, Pa.
Waterman, John Howard, B.Sc., A.B., M.D., Portland, Ore.

Statement to the American Board of Pediatrics and the American Board of Psychiatry and Neurology.—The increasing interest of potential candidates in the field of Pediatric Neurology challenges the 2 American Boards most concerned to determine guide-lines for program directors in Pediatrics and Neurology and for potential candidates in these disciplines. The Committees on Child Neurology of the American Board of Pediatrics and the American Board of Psychiatry and Neurology met on September 21, 1959, and October 21, 1960, and submit to their respective Boards the following statement: Recommendations for a desirable training program in Pediatric Neurology:

1. A year of approved internship.
2. Approved residency training in a pediatric service, sufficient to meet established requirements of the American Board of Pediatrics.
3. Two years of residency training in General Neurology, including the basic neurological sciences, and under conditions consistent with es-

tablished requirements of the American Board of Psychiatry and Neurology.

4. A year of residency training in a pediatric neurology service meeting the established requirements of the American Board of Psychiatry and Neurology.

Flexibility should be allowed in the order in which these components of the training program are taken.

Training Program Facilities:

1. The pediatric neurology service should be in the setting of an active pediatric service with a sufficient number of beds for the number of residents in training and an active outpatient department. It is also recommended that there be opportunities for the trainee to study the newborn and that he also have opportunity to maintain continuing contact with patients in this category.

2. The pediatric neurology service should be under qualified neurological direction.

3. Patient beds assigned to the pediatric neurology service shoud preferably be in close physical contact with the pediatric service and under independent pediatric neurologic direction.

4. The pediatric neurology resident should have responsibility under competent supervision for patient care.

5. It is also desirable that the pediatric neurology program be in a setting in which basic neurological science contacts are readily available.

The adoption of these recommendations might serve as a preliminary step toward further consideration of a formalized subspecialty Board in Pediatric Neurology.

The American Board of Psychiatry and Neurology, Inc.—The following were certified at New York, N. Y., December 10, 12 and 13, 1960:

PSYCHIATRY

Allen, John L., M.D., Lebanon, Pa.
Bacher, Norman M., M.D., Baltimore, Md.
Bartman, Richard E., A.B., M.D., Eldridge, Cal.
Bazilian, Stanford E., B.A., M.D., Philadelphia, Pa.
Benton, Owen D., M.D., Washington, Pa.
Berg, Mary C., M.D., Madison, Wis.
Bernstein, Stanley, M.D., New York, N. Y.
Bindelglas, Paul M., M.D., New York, N. Y.
Blau, David, M.D., Dorchester, Mass.
Bluestone, Harvey, M.D., New York, N. Y.
Braun, Manfred, M.D., New York, N. Y.
Brodsky, Stanley H., M.D., Forest Hills, N. Y.
Carson, Robert S., M.D., White Plains, N. Y.
Chessick, Richard D., M.D., Chicago, Ill.
Chester, Alice S., M.D., Oak Park, Mich.
Claman, Lawrence, M.D., Brookline, Mass.
Cohen, Kenneth D., M.D., Philadelphia, Pa.
Curtis, George Clifton, M.D., Philadelphia, Pa.
Dalgaard, Jens A., M.D., Philadelphia, Pa.
Dean, Earl Frederick, M.D., Warm Springs, Mont.
Dobbs, William H., M.D., Washington, D.C.
Duncan, Marie C., Sc.M., M.D., Evanston, Ill.
Durkin, Harry Anthony, Jr., M.D., Boston, Mass.
Ekwall, Merton L., M.D., Jacksonville, Fla.
Erbaugh, John K., M.D., Philadelphia, Pa.
Errera, Paul, M.D., New Haven, Conn.
Farber, Irving Joseph, M.D., Forest Hills, N. Y.
Flagg, Glenn Willard, M.D., Los Angeles, Cal.
Fleming, Burton A., M.D., M.Sc., Philadelphia, Pa.
Forster, Eugene, M.D., New York, N. Y.
Fowler, John A., M.D., Durham, N. C.
Freeman, David F., M.D., South Lincoln, Mass.
Fuentes, Claude E., M.D., Hato Rey, Puerto Rico.
Garlo, Olgierd C., M.D., Tiffin, Ohio.
Geller, Louis M., M.D., Brookline, Mass.
Ghent, Emmanuel R., M.D., C.M., New York, N. Y.
Gould, Michael H., M.D., Great Neck, N. Y.
Grayson, Robert S., M.D., New York, N. Y.
Gross, George E., M.D., New York, N. Y.
Grunebaum, Henry U., M.D., Boston, Mass.
Hannum, William Young Conn, M.D., San Francisco, Cal.
Haynes, Herbert Curtin, M.D., Bethesda, Md.
Hekimian, Leon J., M.D., New York, N. Y.
Heusler, Anton Frederick, M.D., St. Louis, Mo.
Hoshino, Arthur Y., M.D., Warren, Pa.
Hrushka, Myroslaw, M.D., Pontiac, Mich.
Hull, George H., M.D., New York, N. Y.
Ice, John F., M.D., Boston, Mass.
Imboden, John B., M.D., Ruxton, Md.
Jarett, Lewis A., M.D., Hudson, N. Y.
Jeppson, Janet, M.D., New York, N. Y.
Kase, Lionel A., M.D., Chillicothe, Ohio.
Keill, Stuart L., M.D., New York, N. Y.
Kemph, John P., M.D., Ann Arbor, Mich.
Kennedy, David Francis, M.D., Albany, N. Y.
Kimball, Reid R., M.D., Salem, Ore.
Kissel, Wesley A., M.D., Indianapolis, Ind.
Kurke, Lewis, M.D., New York, N. Y.
Lazar, Norman D., M.D., New York, N. Y.
Lefer, Leon, M.D., New York, N. Y.
Leopoldt, Gerd, M.D., Toledo, Ohio.
Levine, Jerome Merrill, M.D., New York, N. Y.
Lewis, Alfred B., Jr., M.D., New York, N. Y.
Lipton, Merrill I., M.D., Newtown Square, Pa.
Mallory, George Lorenzo, M.D., Los Angeles, Cal.
Mannucci, Mannuccio, M.D., New York, N. Y.
McLeod, Stuart Wilson, M.D., New York, N. Y.
McNelis, Desmond P., M.B., Baltimore, Md.
Meyen, William M., M.D., Beacon, N. Y.
Monfort, Mariam Felicia, M.D., San Mateo, Cal.
Montgomery, John Stuart, M.D., New York, N. Y.
Moore, Richard John, M.D., Norwich, Conn.
Moss, Leonard M., M.D., New York, N. Y.
Myers, Morris, M.D., East Orange, N. J.
Nadelman, Maurice S., M.D., New York, N. Y.
Najera, Gabriel A., M.D., Dallas, Tex.
Noordsij, A. Johan, M.D., Summit, N. J.
Nunn, Robert Read, M.D., Chicago, Ill.
Park, Lee Crandall, M.D., Baltimore, Md.
Parks, John Hulbert, M.D., Charlottesville, Va.
Perlstein, Abraham P., M.D., Brooklyn, N. Y.
Philips, Robert Nathan, M.D., Fullerton, Cal.
Pogul, Stanley, M.D., New York, N. Y.
Porter, John H., III, M.D., Newton Centre, Mass.
Price, John M., Jr., M.D., New York, N. Y.
Proano, Augusto, M.D., Sedro-Woolley, Wash.
Reiser, David Emerson, M.D., Boston, Mass.
Riley, Peter B., M.D., Canandaigua, N. Y.
Robbins, Edwin S., M.D., New York, N. Y.
Roukema, Richard William, M.D., Ridgewood, N. J.
Ruff, George Elson, M.D., Philadelphia, Pa.
Salaban, Bohdana, M.D., Buffalo, N. Y.
Schmidt, Kurt T., M.D., Williamsburg, Va.
Schulman, David, M.D., New York, N. Y.
Schulman, Herbert Jules, M.D., New York, N. Y.
Shore, Miles F., M.D., Needham, Mass.
Siegman, Alfred J., M.D., New York, N. Y.
Silber, Austin, M.D., New York, N. Y.
Simopoulos, Aris Michael, M.D., Baltimore, Md.
Smith, Thomas Heyward, M.D., Ridgewood, N. J.
Snyder, Frederick, M.D., Kensington, Md.
Spector, Bernard, M.D., New York, N. Y.
Stein, Myron L., M.D., New York, N. Y.
Stoffel, Jack O., M.D., Denver, Colo.
Takahashi, Yasuo, M.D., Sykesville, Md.
Tucker, Kenneth Fredric, M.D., New York, N. Y.
Ure, Barbara, M.D., New York, N. Y.
Veeder, Raymond, M.B., B.S., Hartford, Conn.
Wainwright, William Howard, M.D., New York, N. Y.
Walden, Heinz J., M.D., Norman, Okla.
Weber, William Frank, M.D., New York, N. Y.
Weil, John Leopold, M.D., Westwood, Mass.
Wiggins, George E., M.D., Houston, Tex.
Wills, Benjamin Charles, M.D., Savannah, Ga.
Winer, Albert S., A.B., M.D., Washington, D. C.
Zaldivar, Raul A., M.D., Chicago, Ill.
Zirgulis, Justine, M.D., Chicago, Ill.

NEUROLOGY

Goodson, Michael Piers, M.D., Miami, Fla.
Jampel, Robert S., M.D., Brooklyn, N. Y.
Karp, Herbert Rubin, A.B., M.D., Atlanta, Ga.
Keller, Niklaus J. A., A.B., M.D., Washington, D.C.
Kinkel, William Revere, B.A., M.D., Tonawanda, N. Y.
Low, Niels L., M.D., New York, N. Y.
Millichap, Joseph Gordon, M.D., Rochester, Minn.
Rapin, Isabelle, M.D., New York, N. Y.
Reinmuth, Oscar McNaughton, M.D., Miami, Fla.

BOOK REVIEWS

Americans View Their Mental Health. By *Gerald Gurin, Joseph Veroff* and *Sheila Feld*. Monograph Series No. 4, Joint Commission on Mental Illness and Health. (New York: Basic Books Inc., 1960, pp. 444. $7.50.)

Many attempts have been made recently to survey the extent and seriousness of mental and emotional disabilities among the American people. Other studies have been aimed at measuring the extent and quality of public understanding of mental illness. Still others have tried —usually without striking success—to arrive at a generally acceptable definition of mental health. The present study claims to be unique in that it is an effort, elaborate and comprehensive in conception, to gather information on what the American people think, subjectively, about their own mental health.

A basic assumption in this study, as with others undertaken by the Joint Commission, is that every person from time to time will experience psychological trouble. He will cope with this with varying degrees of success, by his own efforts or with help from someone else. Thus "mental health springs not from avoiding all stress . . . but from a capacity to accept normal amounts of stress with some ability to rebound."

These are surely vague, relative and shifting elements to appraise, whether in oneself or in others. After all, how much is a "normal" amount of stress and how can one measure "degrees" of successful coping? But the attempt to study how people rate *themselves* in this regard is defended on the grounds that "the needs of people—as they themselves feel them . . . and express them—ultimately determine the ways in which organized efforts will be made to meet these needs."

The study was conducted by the University of Michigan Survey Research Center. Well-established techniques, based on the probability sampling methods used in public opinion polls, were used. The sample population comprised 2,460 adults living at home, selected according to the usual demographic indices, (age, sex, education, income, occupation, place of residence, *etc.*) so that it was truly representative of the national population. The data were collected by trained interviewers who followed a carefully designed and tested questionnaire. Interviews were lengthy, averaging about 2 hours each. The resulting information was coded, and analysed according to modern statistical methods.

In general two kinds of questions were asked. The first dealt with people's adjustment to life, whether they were happy or unhappy, worried or unworried, and their attitudes toward marriage, parenthood and work. The second kind of question dealt with what they do about their problems, what help they seem to need and from whom.

Whether "happiness" as judged subjectively has much to do with a person's mental health or not may be debated. Nevertheless the study showed that 89% of American people are either "very happy" or "pretty happy." The commonest sources of such desirable feeling were evenly divided between economic and material sufficiency on the one hand and children in the family on the other. Interestingly enough, relatively few people—about 4%—were worried or made unhappy by fear of international catastrophe, atom bombs and so on. In spite of the high incidence of happiness as reported in this survey, about 25% of the sample admitted that they worried "a lot" or "all the time." And about 20% felt that they had been close to a "nervous breakdown" at some time. Nearly 1 in 4 admitted having had personal problems sufficiently serious to warrant consultation with a professional person, but only 1 in 7 actually did so. Forty-two percent of these consulted clergymen, 29% physicians, 18% psychiatrists or psychologists and 10% social agencies of one kind or another. Of those seeking such help, 58% felt that they were definitely helped.

There is little evidence to support the idea that many people with troubles talk them out with the bar-tender, the taxi-driver or the fortune-teller. However, many do talk about their problems with their spouses, members of their family or their friends.

Dr. Ewalt, Director of the Joint Commission, believes that this study is probably the first piece of convincing evidence that public education in mental health principles has increased general understanding of the human mind and has led to a greater recognition of the psychological nature of many problems. This is particularly evident in the younger and better educated groups.

The study will obviously be of great interest to those concerned with public education, public information and the general epidemiology in the field of mental health and illness.

J. D. Griffin, M.D.,
Toronto, Ont.

A Pharmacologic Approach to the Study of the Mind. Edited by *Robert Featherstone* and *Alexander Simon*. (Springfield, Ill. : Chas. C Thomas, pp. 397. $10.75.)

The enormity of information given to us in the 12 printed pages comprising Aldous Huxley's contribution to this volume, is quite unbelievable. He shows us how this volume really comprises 41 books which we all need to read if we are to practice a modern 1960 brand psychiatry, since each man who presented a paper at the symposium at the University of California could have produced a book on his topic. However, each was compelled to concentrate into a minute volume all his facts for presentation to this congress of scientists.

Thus, in much the same manner that Huxley uses to make his point about "Hedgehog" (condensed) science versus "Fox" (all encompassing) science, one can envisage this book as a collection of hedgehog condensations or capsules (poems) of knowledge in this new frontier for psychiatric expansion.

It *is* indeed exciting (after 35 years in psychiatry) to read Joel Elkes' scholarly presentation of how far we have gone already in "Some Points of Reference in Psychopharmacology," when we still think of this field as so new and unexplored in psychiatry ; and "The Effects of Drugs . . . on the Energy Metabolism of the Brain" by Seymour Kety ; and Sidney Udenfriend's brief on "Psycho Chemistry" wherein he points out that, "Within recent years it was shown that Iproniazid . . . could indeed interfere with serotonin and noradrenalin metabolism" and "We have found a remarkable agreement between the dosages worked out by psychiatrists, through trial and error, and the dosages needed for maximal inhibition of mono amine oxidase in man."

Then President Malamud's final comment in his discussion of "A Clinical Approach to Mental Disease" : "To the clinician this is very exciting . . . and highly promising in spite of occasional controversy. The pragmatically oriented medical practitioner will do well to maintain an objective attitude" (while developments continue in this field).

The most unsophisticated novice in the field of biological chemistry will realize from a casual reading of Albert Zeller's succinct chapter, "The Concept of Enzymes . . .," the inescapably intimate relationship of the enzymes to this new and most fruitful field of research. The romantic description of his years of slow painstaking delving into this new biochemical frontier cannot fail to whet the appetites of investigative minds, with the realization that better than platinum or uranium equivalents in the knowledge of human disease lie in the revelations to come, to the researcher who can fathom the depths of this exceedingly complex wilderness of biological chemistry.

This book makes a most interesting new departure by presenting 6 pages of candid camera photos of the various authors.

All those who listened intently as Ralph Gerard delivered his Academic Lecture to all APA listeners only a few years ago, will want to peruse his further thoughts at this time.

Nothing is available in the literature to equal Nathan Kline's exhaustive survey of the current literature concerning "Therapy with Psychic Energizers" plus his own invaluable comments in this field which he pioneered with his collaborators. This chapter alone is worth the price of the book.

In his excellent summarization consisting of 5 printed lines, Dr. John *B.* Saunders, Dean of the California School of Medicine, wisely advises the reading of Dr. John *C.* Saunders' chapter "Psychic Energizers : A Source of Psychopharmacological Theories"—an astute capsular summarization indeed, and a gem of scientific effluvience.

Many equally worthy chapters are not mentioned here purely because of space restrictions. But I believe there is no more essential book for every psychiatrist to possess than this—and likewise for every internist or other physician using modern chemotherapy for psychiatric illness, the book is *a must !*

The only obvious defect I encountered in reading this book was the absence of any statement by any of the many authors, stressing the need for keeping accurate data on blood transaminase findings in all cases being administered energizer chemotherapy. It would be most unfortunate if this observation, which I have stressed in a number of papers, was ignored by the vast body of clinicians who are administering the various antidepressant chemicals in ever increasing quantities today. The warning sounded by discovery of an elevated SGO-T or SGP-T which results in prompt interruption of the medication, or sharp reduction in dosage, has undoubtedly saved many doctors from serious embarrassment that might have developed if serious side effects had developed. Especially in these early days when the groundwork is being built for the psychopharmacology of tomorrow, and perhaps for years to come, the clinician needs to be fully informed regarding every laboratory or other adjunct that will increase his skill and also will enhance the safety of his patient.

I shall consider it one of the major additions

to my library wherein Freud's Collected Papers were considered the major indispensable item 30 years ago, and Menninger's various volumes some years later.

THEODORE R. ROBIE, M.D.,
Montclair, N. J.

AN MMPI CODEBOOK FOR COUNSELORS. By *L. E. Drake* and *E. R. Oetting*. (Minneapolis: University of Minnesota Press, 1959, pp. 140. $3.75.)

The authors have produced a very useful manual for the counselor of the normal, young adult. Based on research conducted between 1945 and 1957 with over 4,000 students who were counseled at the University of Wisconsin, personality characteristics associated with various MMPI profiles are presented.

Introductory sections present a thoughtful approach for the use of psychometric data in counseling, and discuss the research from which the codebook was developed.

BERNARD LUBIN, PH.D.,
Indianapolis, Ind.

LE RAZZE E I POPOLI DELLA TERRA. Edited by *Renato Biasutti*. 4 vols., 3rd ed. (Turin, Italy: Unione Tipografico-Editrice Torinese, 1959. Lire: 36,500.)

There is nothing like these four anthropological volumes in any language. They cover the whole world of mankind from the beginning of his history down to the present time in all the wide variety of his different phases, both physically and culturally. There are literally thousands of illustrations, many in full color, maps, tables, and extremely readable discussions of man's psychological, physical, and cultural traits. The various sections are written by Italian experts in the fields in which they write, and the appeal of these volumes is to the general reader as well as the student. The bibliographies and author and subject indexes are excellent, and altogether these are most admirable volumes which will long serve the most useful purpose of emphasizing the fact that the proper study of mankind is man.

ASHLEY MONTAGU, PH.D.,
Princeton, N. J.

THE DANCE. By *Joost A. M. Meerloo*. (Philadelphia & New York: Chilton Co., 1960, pp. 152. $4.95.)

The pictures in this book are worth the price of the book. Of the text by Dr. Joost A. M. Meerloo the less said the better, for it was obviously written without any recourse to authoritative sources, and is entirely lacking in those dimensions of understanding which only the anthropologist can provide. The subject is an important one, and therefore it is good to have this book for, even though it be textually inadequate, it is so continuously the source of disagreement and doubt that it will give the reader furiously to think. It would not be unfair to Dr. Meerloo to cite some of his typical opacities in view of the fact that his brief text and comments are so bestrewn with them—but I shall refrain. As I have said, the pictures make the book very worth while—the banality of the text cannot detract from them. Those who are interested will find both interesting.

ASHLEY MONTAGU, PH.D.,
Princeton, N. J.

THE OPEN AND CLOSED MIND. By *Milton Rokeach*. (New York: Basic Books, 1960, pp. 447. $7.50.)

This rather well produced book reports in detail the results of a series of studies carried out by Rokeach and his students in pursuit of the measurement and the correlates of "dogmatism" and "opinionation." Their work is essentially and confessedly a derivation from the well known studies on the authoritarian personality. As many critics had pointed out, authoritarianism in the original work was entirely right-wing or Fascist authoritarianism; Rokeach has tried to redress the balance by concerning himself with dogmatic and opinionated personalities such as might be found right, left and centre, and indeed, in many fields quite unrelated to politics. Two scales entitled "Dogmatism" and "Opinionation" were accordingly constructed and shown to be reasonably reliable and not highly correlated with radical or conservative views. These scales were administered to many different groups in the United States as well as to some small British samples. The results are presented in a context of theorising so prolix, and at the same time so woolly, as to defy a brief summary.

Some of the results are of psychological interest, particularly those in which the author has tried to relate scores on his scales to the subject's method of attack on certain experimental problems. There are, however, a number of criticisms which have to be made and which very much reduce the acceptability of his conclusions. In recent years the authoritarian studies have been severely criticized because no attention was paid to the problem of "response set," *i.e.*, the tendency of people to endorse certain types of responses irrespective of the content of the question. There is ample evidence for the existence of such sets and their relevance to work of this kind, yet they

are only mentioned very briefly and inadequately at the end of the book and the writer is forced to conclude that unless the proper analysis of such response sets is carried out ". . . we will not be able to tell for sure, what role 'response set' has played in our research." The reader may justly wonder why such a simple and crucial experiment was not done, and how he can be expected to interpret data which, in the author's own view, apparently cannot be interpreted.

Other doubts arise with respect to the statistical treatment of the data which is, at best, uninspired and, at worst, unacceptable. As an example of the writer's uninspired way of treating the data we may mention the fact that no where is Multiple Discriminant Function Analysis used, although several of the experiments cry out for something a little more sophisticated than simple *t* tests. As an example of the unacceptable, consider Table 19.8 in which means are given for three groups of the age at which bedwetting stopped. The mean age for the dogmatic group turns out to be 6.2 ; that of the non-dogmatic group, 2.2. This looks interesting until it is realised that of the 25 people in the non-dogmatic group, 21 replied that they did not remember, and that the author quite arbitrarily assumed that this reply could be set as equal to two years for the purpose of establishing the mean age ! The difference between the groups, therefore, is produced entirely by this purely arbitrary decision for which no rationale is given. This table will for evermore become a cherished part of my lecture on the abuses of statistics, given every year to incoming students.

The book as it stands cannot, for the reasons given, be considered a notable contribution to social psychology. If the author had taken seriously his responsibilities to solve the problem of "response set" as applied to his scales, and had got a statistician to go over his tables, the resulting book might have been interesting or even important. It seems a pity that the urge to publish was apparently too strong to make it possible for him to undertake these small additional chores.

H. J. Eysenck, M.D.,
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Life Against Death. By *Norman O. Brown.* (Middletown, Conn. : Wesleyan University Press, 1959, pp. 366. $6.50.)

This is a book that links Freud's death instinct concept with religion, with man's destructiveness, and with his need for salvation. The psychiatrist is apt to encounter it when his patient enters, anxious and trembly, and demands an answer to Dr. Brown's apparently telling logic. The fact that all of these topics are speculative, to say the least, is overlooked by the author and is apt to be overlooked by the easily misinformed layman. Evidently Dr. Brown has encountered Freud rather late in life and embraces him with a passion and uncriticalness of a middle-aged fling at romance.

The cornerstone on which this book is erected is the psychoanalytic concept of repression. Once having shown it to be a bad thing and having documented man's many woes caused by his repressive tendencies, the author's next obvious step is : what is the way out ? Here in a brief, final chapter, we are given the old concept of redemption through expatiation dressed in a modern, existentialistic frame. On the way to this denouement, there are many unsettling passages including the statement that the whole human race is neurotic and quotes from philosophers from Plato to Whitehead, bent a bit to fit the author's thesis. Yet this is obviously a sincere book and being critical of Dr. Brown's efforts makes me as guilty as punching holes in CARE packages. Yet a book like this can cause a good deal of alarm because it is a serious well-intended effort and this stamp is easily mistaken for veracity. I note my copy is the third printing so I must assume that attempts to join psychoanalysis and religion into a palatable gruel is still quite popular. There have been many more dispassionate and less passionate attempts than the volume under consideration.

Don D. Jackson, M.D.,
Palo Alto, Calif.

Diseases of the Nervous System in Infancy, Childhood and Adolescence. By *Frank Ford.* (Springfield, Ill. : Charles C Thomas, 1959, pp. 1548. $29.50.)

Doctor Ford, in his fourth edition on pediatric neurology, has maintained the high quality of this concise encyclopedic reference volume. The author has fully justified the additional 350 pages in the new edition (1,548 pages as compared with the 1,181 of the 3rd edition) in meeting the important advances of pediatric neurology since 1952. Chapter I of the previous edition on "The Examination of the Nervous System" has been omitted. Some might believe that the author could have more appropriately omitted the section on neuro-anatomy or cut back on some of the other chapters so as to have included the recognized important chapter on Examination. On the other hand,

because of the important advances that have been and are being made in neuro-anatomy and neuro-physiology and their increasing clinical contribution to pediatric neurology, this reviewer believes the author can justify deleting the chapter on Pediatric Neurological Examination, available in other textbooks on child neurology and which do not serve the encyclopedic and extensive reference book purpose singly covered by this book.

The edition brings up to date the new advances in the prevention and treatment of neurological disorders as, for example, the Salk vaccine for prevention of poliomyelitis and several additional drugs now available in the treatment of tuberculous meningitis in addition to the one streptomycin mentioned in the 3rd edition and the more recent drugs for the control of the epileptic disorders. Many advances in the diagnosis and treatment of neurological disorders in infancy and childhood are apparent in the chapter on toxic and metabolic disorders enlarged from 155 in the 3rd edition to 225 pages in the current edition. This includes such new subjects as disorders of protein metabolism, familial amyloidosis and the different forms of cerebral sclerosis. There are additional practical subjects on insect, snake and fish bites.

The author's chapter on "Psychogenic Disorders Simulating Organic Disease of the Nervous System" could be expanded into the field of neurology of behavior in the light of our contemporary advances in the structure and function of the nervous system between relating behavior to the nervous system, particularly with respect to the rapidly maturing brain of the infant and child. Perhaps the author in a future edition may well require 2 volumes to include the deleted chapter on the neurological examination and extending the chapter on psychogenic disorders into a discussion of behavior disorders of the infant and child and their relation to neurology.

This reviewer concludes that there is currently no book in pediatric neurology which so ably and comprehensively covers this subject, in addition to being an excellent reference book on the subject. It continues an essential library tool to all neurologists and to pediatricians interested in the neurological disorders of infants and children. As a child's behavior symptoms and signs may require the differential consideration of neurological and/or environmental etiological factors, this book has an essential place in the library of child psychiatrists.

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BEHAVIOR AND PHYSIQUE. By *R. W. Parnell, M.A., D.M.* (Baltimore, Md.: Williams and Wilkins, 1958, pp. 134. $7.00.)

This may be a difficult book for the average American psychiatrist to read, perhaps because of his relatively limited knowledge of or interest in constitutional aspects of psychiatry. The author's method of somatometry is closely related to that of Sheldon's and can be viewed in some respects as an extension of the latter. As such the author deals relatively briefly with Sheldon's methods as an introduction to his own. If his American readers are not sufficiently acquainted with the concepts and descriptive devices utilized by Sheldon, they may find themselves burdened with the task of having to learn about 2 methods, the understanding of the second of which is dependent upon familiarity with the first. The author's style of writing is concise, concentrated, and demanding of the reader's attention at all times. Furthermore, the author has a curious predilection for combining a summary with some discussion of topics previously unmentioned. Nevertheless, for those who are interested in its subject matter, this book is a worthwhile addition to a library.

In the matter of estimating somatotype, the author states his aim as "giving an index that will remain constant throughout life," despite the variation in measurements and proportions occurring in different age periods. He does not claim to have achieved this aim nor is he even sure that it is achievable. His methods consist of physical anthropometry in conjunction with photography. His shorthand descriptive system is simpler than that of Sheldon; he utilizes the terms fat, muscularity, linearity as the 3 essential somatic components. Furthermore, he includes only 2 of these in his actual description of individuals, with the dominant component coming first and placed in capitals (*i.e.*, Fl or Lf, depending on which is dominant). He has studied a relatively large number of individuals and takes up the questions of civil state, variety of human matings, fertility, sex ratio of children, academic performance, selection of occupation, and susceptibility of individuals to mental illness at various ages, all with reference to somatotype. For example, in his series, Mf types form the most stable group in both sexes. Lf types are most disposed to breakdown before 25 years of age, whereas Lm types are the most susceptible from 25-34. The Lf type, along with Fl in women and Lm in men, is found in a large proportion of younger schizophrenic patients. Lf men are found to do well academically despite their susceptibility to emotional disturbance.

The author suggests that somatometry may become a useful adjunct to other methods of clinical observations. To this reader the book was stimulating if only because it brought into focus the extent to which this entire subject appears to be neglected by American psychiatrists. It is entirely possible that with the increasing interest in constitutional and biological aspects of psychiatric illness this situation may change. At the moment, the book must be recommended as a thoughtful and scholarly work, tentative in its conclusion, and of special interest to those who tend to consider the constitutional as well as the psychologic aspects of emotional disorder.

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MENTAL DEFICIENCY. Edited by *Ann M. Clarke and A. D. B. Clarke.* (Glencoe: The Free Press, pp. 513. $10.00.)

This book is a collection of 18 papers, organized and edited in such a fashion that it can serve as a basic reference book on mental deficiency. Most of the authors are British psychologists, and the book is written primarily for psychologists. After presenting their basic considerations and some epidemiological data, they describe the theoretical and practical problems in the clinical field. The book has 3 aims: to summarize the literature on the psychological and social aspects of mental deficiency against the background of genetics and neuropathology; to show the intimate and reciprocal relationship between theory and practice, together with the use of experimental methods in both areas; and to indicate in a practical manner how the learning defects and social problems posed by the subnormal may be ameliorated.

There are few comprehensive books on mental deficiency. Some written by physicians, for physicians, emphasize the medical aspects. To psychiatric readers, acquainted with these publications, the present book will serve as a guide on the psychological, educational, and sociological problems of the field. They will likely find the information pertaining to medicine quite limited and somewhat out-of-date, particularly that relating to the etiology of mental defect and to the methods of biological treatment. Present-day treatment of such conditions as phenylketonuria and galactosemia, and the use of psychopharmacological agents and other drugs, are described quite briefly. However, several very excellent chapters will adequately compensate the reader for this lack.

Each chapter on different aspects of this subject summarizes the pertinent literature, together with critical comments on the articles reviewed. These discussions give an excellent historical account particularly of the work of psychologists and sociologists. The lack of factual information is repeatedly emphasized, with some suggestions for desirable research approaches.

This reviewer was particularly impressed with the discussion of some topics; for instance, the brief section of pseudo-feeblemindedness clarifies many issues of diagnosis and prognosis. The authors emphasize that "pseudo-feeblemindedness" involves mistaken prognosis, rather than diagnosis. Equally good is the chapter on learning and mental defect, in which clear differentiation is made between the broad clinical syndrome of mental defect and the deficit in learning ability. The excellent chapters on brain damage and cerebral palsy discuss these syndromes and their relationship to intellectual impairment.

Part III on "Practical Problems" describes many of the issues encountered in the daily clinical practice with the mentally deficient. The comments are applicable to private practitioners, to those in public institutions, or in school settings. The chapter on speech disorders—the most common handicap in the mentally deficient population—classifies these conditions by etiology and describes speech therapy and other corrective techniques in simple, easily readable language.

A considerable amount of scientific information is combined with practical suggestions. The book conveys the personal warmth the authors feels toward the deficient patient and reflects years of experience in research and in clinical work in close collaboration with physicians. It conveys the authors' optimistic outlook toward the problems of mental deficiency; a sense of worthwhileness of professional investment in therapeutic endeavors; and an image of good social prognosis, particularly for the mildly defective individual. Clinicians will appreciate this overtone.

The book should be an excellent addition to the library of any psychiatric institution, or to any facility dealing with problems of mental deficiency. It should serve as a good reference book for practicing psychiatrists who want to become acquainted with this major psychiatric problem. It should be required introductory reading for clinical psychologists starting work with the mentally deficient.

GEORGE TARJAN, M.D.,
Pacific State Hosp.,
Pomona, Calif.

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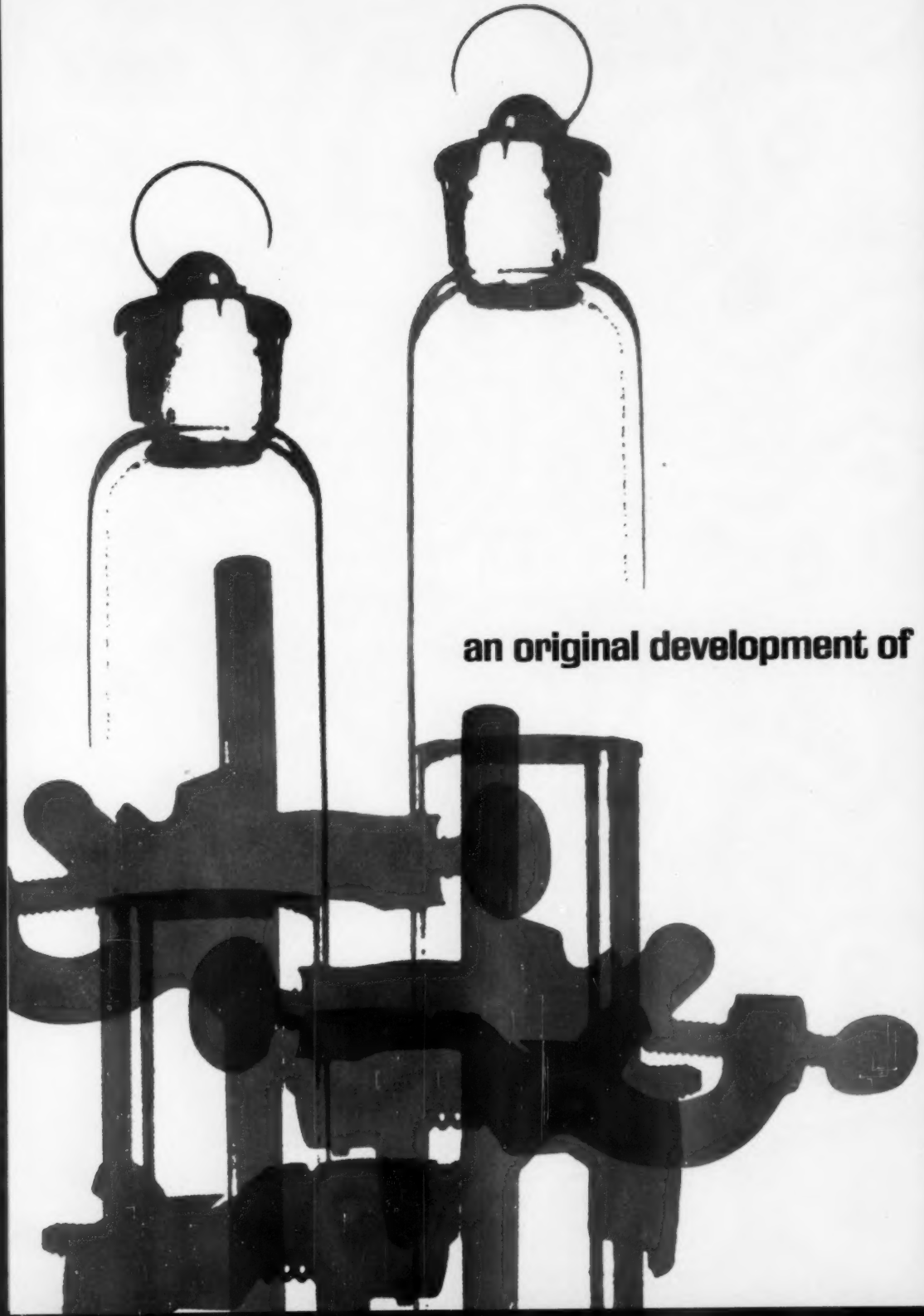

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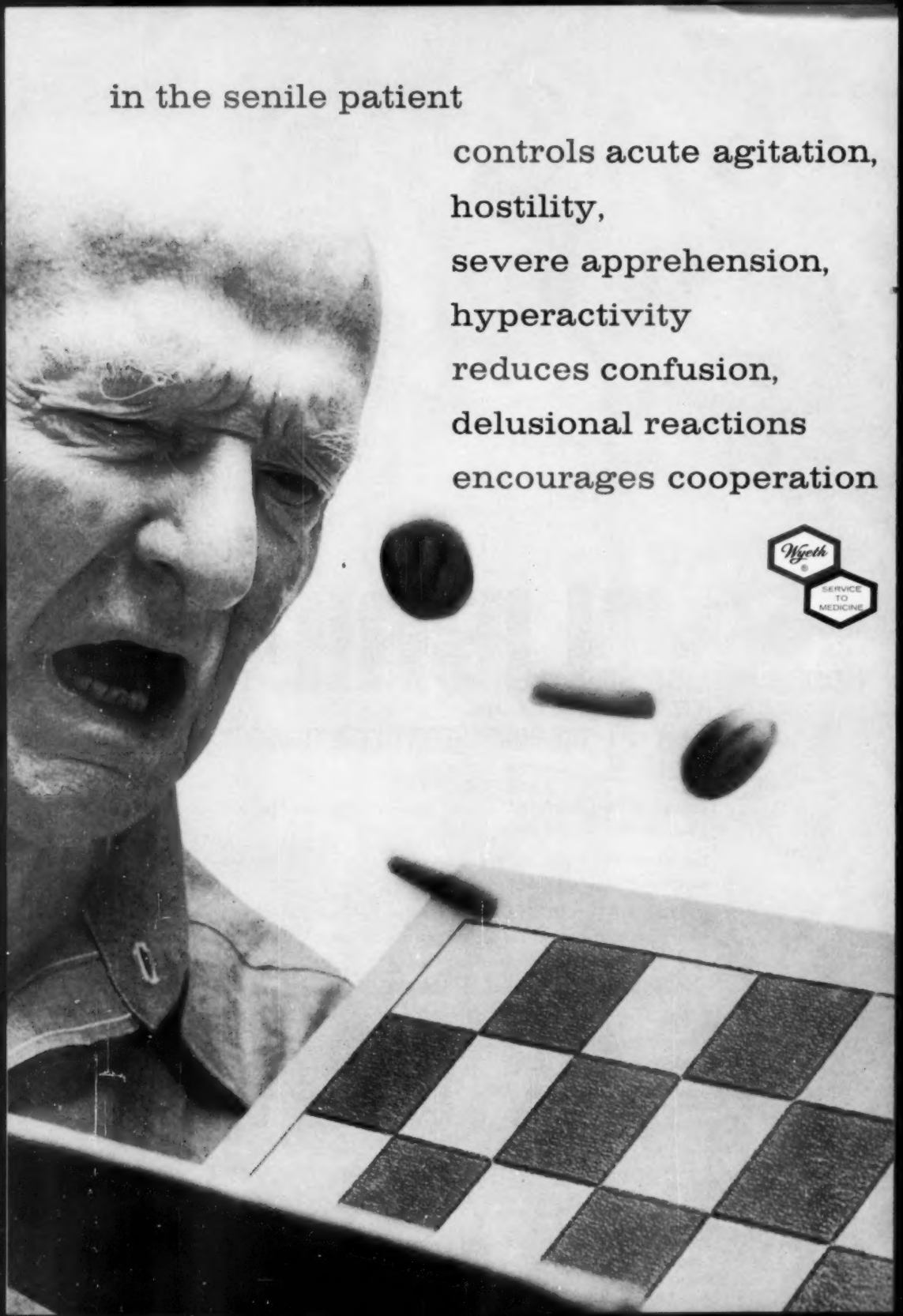
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In the management of pain associated with malignancy or chronic disease, SPARINE may be administered orally or I.M. in 25 to 50 mg. doses repeated at 4 to 6 hour intervals to allow for reduced dosage of analgesics. *In medical emergencies,* to allay apprehension and facilitate diagnosis or therapy, SPARINE should be given I.V., I.M. or orally in 50 to 200 mg. doses. See direction circular for details.

PRECAUTIONS. Although rare, drowsiness, dizziness and transitory postural hypotension may occur. If a vasopressor drug is indicated, norepinephrine is recommended since SPARINE reverses the effect of epinephrine. Agranulocytosis has been reported in only 18 cases in about 3½ million patients. If, however, signs of cellular depression—sore throat, fever, malaise—become evident, discontinue SPARINE, check white blood cell count, and initiate antibiotic and other suitable therapy if indicated. Seizures, reported as occurring during SPARINE therapy, occur usually with rapid large increases in dose and at a daily dosage above 1 Gm. Caution must be exercised when administering SPARINE to patients with a history of epilepsy. Avoid perivascular extravasation or intra-arterial injection, as severe chemical irritation or inflammatory response may result. Because of its facilitating action on analgesics and central nervous system depressants, give them only in reduced dosage with SPARINE. Do not use in comatose states due to central nervous system depressants (alcohol, barbiturates, opiates, etc.). Use with caution in patients with cerebral arteriosclerosis, coronary heart disease, or other conditions where a drop in blood pressure may be undesirable.

For further information on prescribing and administering SPARINE *see descriptive literature, available on request.*

DRUG-INDUCED PARKINSONISM IS ON THE RISE,
reflecting the growing use of potent tranquilizers. These extrapyramidal disturbances may be reduced by lowering tranquilizer dosage.

***"It is almost always preferable, however, to merely add oral AKINETON®... since this avoids the risk of loss of therapeutic benefit and permits uninterrupted phenothiazine therapy."**

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motor restlessness · akathisia · torticollis · oculogyric crises · chorea

remarkably safe — "Akineton was not responsible for a single dangerous or toxic effect in the 500 patients treated."*

Dosage: Doses required to achieve the therapeutic goal are variable and individually adjusted. The following are average doses.

Drug-induced extrapyramidal disorders
1 tablet (2 mg.) one to three times daily

Parkinson's disease
1 tablet (2 mg.) three or four times daily

AKINETON hydrochloride tablets—2 mg., bisected, bottles of 100 and 1000.

*Ayd, Frank J., Jr.: Drug-induced Extrapyramidal Reactions: Their Clinical Manifestations and Treatment with Akineton. Psychosomatics 1:143 (May-June) 1960.

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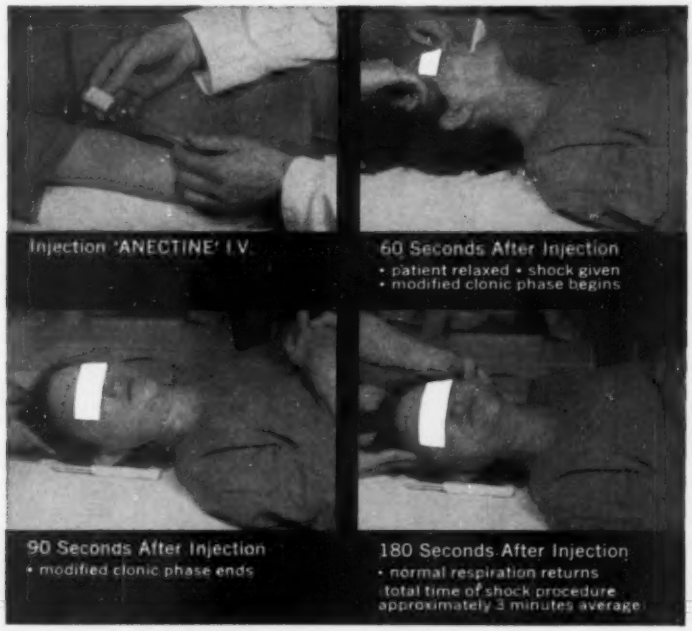
Succinylcholine Chloride



rapid relaxation rapid recovery

Comments from the literature:

"... method of choice."
Havens, L. L.: Dis. Nerv. System *19*:1 (Jan.) 1958.

"... recommend its use."
Impastato, D. J., and Gabriel, A. R.: Am. J. Psychiat. *114*:698 (Feb.) 1958.

"... treatment of choice."
Michael, K. D., and Wunderman, D. C.: J. Nerv. & Ment. Dis. *126*:535 (June) 1958.

"... irrespective of age."
Robie, T. R.: J. M. Soc. New Jersey *52*:82 (Feb.) 1955.

Complete literature available upon request.

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Injection: 20 mg. in each cc., multi-dose vials of 10 cc.

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to curb anxiety without curbing precision skills

Because effective antianxiety measures include:

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Indications: For use in the common anxiety-tension states, as well as in virtually all conditions in which heightened tension is a barrier to mental or somatic well-being.

Dosage: The usual dosage in adults is one tablet three times daily, preferably just before meals. In insomnia due to emotional tension, an additional tablet at bedtime usually affords sufficient relaxation to permit natural sleep.

Supplied: Pink, coated, unmarked tablets, 200 mg., bottles of 100.

Additional information on STRIATRAN is available to physicians on request.

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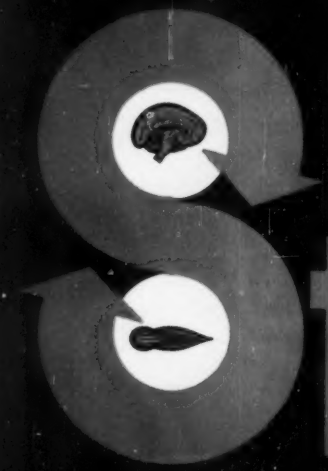

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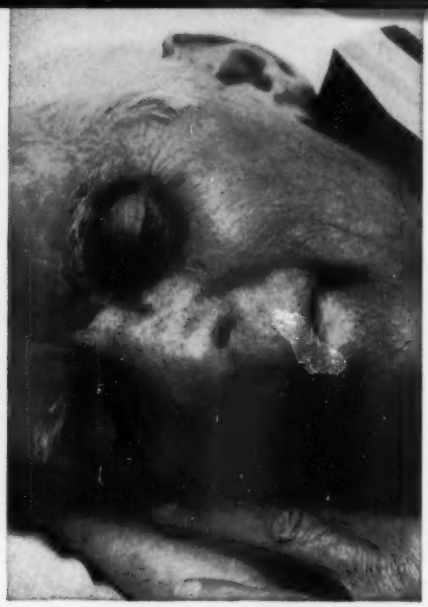

in the disturbed patient...

UNTROUBLED SLEEP

NOLUDAR induces quiet sleep, even in patients with organic psychosis who have severe sleep resistance. Nighttime distortions and fears usually disappear; pre-sleep disorientation and agitation are reduced. NOLUDAR does not modify the EEG of the waking patient nor significantly alter the tracings of physiologic sleep. Further, NOLUDAR does not depress abnormal brain-wave activity. To provide sound, restful sleep without sacrificing safety, without prolonging awakening time, without altering the natural sleep pattern, specify NOLUDAR, the non-barbiturate hypnotic.

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NON-BARBITURATE HYPNOTIC

When a gentler hypnotic effect is desired, NOLUDAR 200 (200-mg tablets). For daytime sedation, NOLUDAR 50 (50-mg tablets).

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DORNWAL®
is the tranquilizer versatile enough to be used almost anywhere.

Take, for instance, the woman in our picture, suffering from a really severe tension headache. Aspirin she has tried, of course; but suppose she's called you and you prescribed Dornwal. What would you expect?

First, let us say you told the druggist to indicate the dosage that our clinical research has shown is useful in these cases — 1 or 2 tablets t.i.d. In all probability, she would experience relief of pain and a general relaxation in less than an hour. If she is doing her housework, she could go on with it, because she wouldn't get sleepy.

Dornwal is one tranquilizer that doesn't make people sleepy. It's a tranquilizer pure and simple. Its effectiveness you will see clearly the next time you encounter a patient given to tension headaches. Try Dornwal and see the results.

Dosage: One or two 200 mg. tablets three times a day. Children, age 6 to 16, one or two 100 mg. tablets two times a day. Administration limited to three months' duration.

Supplied: 200 mg. yellow scored tablets, and 100 mg. pink tablets, each in bottles of 100 and 500.

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No absolute contraindications to the use of Dornwal are known. There have been no reports or evidence of habituation, addiction or drug tolerance in animal or clinical studies. Dornwal is relatively free from untoward effects when administered at recommended dosages.

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Wallace & Tiernan Inc., Belleville 9, N. J.

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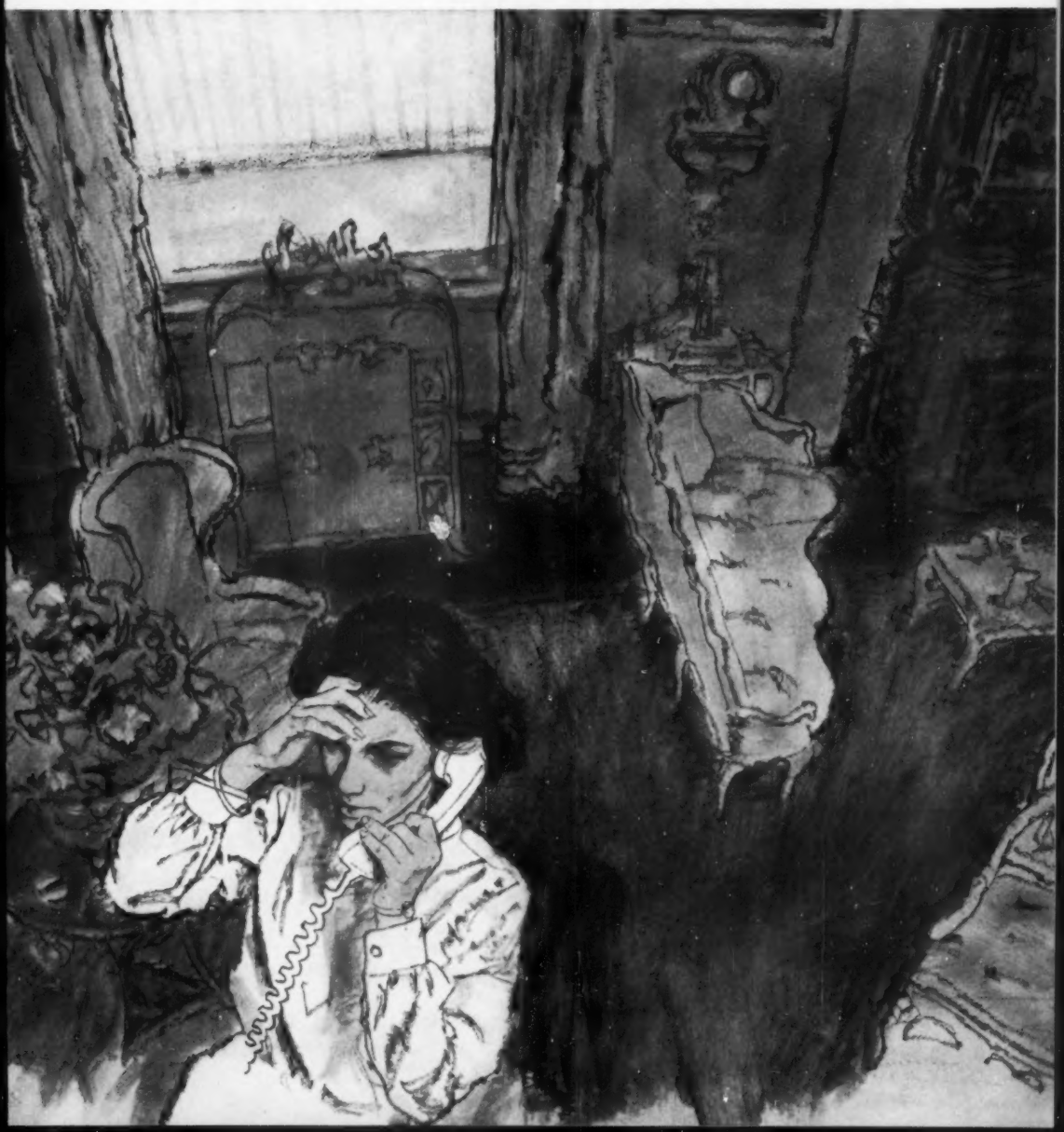

New Books For The Psychiatrist

Published In January, February And March 1961

Leo Alexander, Austin W. Berkeley, Alene M. Alexander

MULTIPLE SCLEROSIS, PROGNOSIS AND TREATMENT: A Nosometric Approach. Pub. Feb. '61, 208 pp., 63 il. (Amer. Lec. Objective Psychiatry), $7.50 ***New***

C. J. Ducasse

A CRITICAL EXAMINATION OF THE BELIEF IN A LIFE AFTER DEATH. Pub. Jan. '61, 336 pp. (Amer. Lec. Philosophy), $8.75 ***New***

Malinda Dean Garton

TEACHING THE EDUCABLE MENTALLY RETARDED—PRACTICAL METHODS. Pub. March '61 ***New***

Jerome Kagan, and Gerald S. Lesser

CONTEMPORARY ISSUES IN THEMATIC APPERCEPTIVE METHODS. Pub. Jan. '61, 352 pp., $12.00 ***New***

Alfred H. Katz

PARENTS OF THE HANDICAPPED: Self-Organized Parents' and Relatives' Groups for Treatment of Ill and Handicapped Children. Pub. Feb. '61, 168 pp., $6.00 ***New***

John M. Martin

JUVENILE VANDALISM: A Study of Its Nature and Prevention. Pub. Feb. '61, about 197 pp., 12 il. ***New***

J. H. Quastel, and David M. J. Quastel

THE CHEMISTRY OF BRAIN METABOLISM IN HEALTH AND DISEASE. Pub. Feb. '61, 184 pp., 23 il. (Amer. Lec. Living Chemistry), $6.50 ***New***

Robert N. Rapoport

COMMUNITY AS DOCTOR: New Perspectives on a Therapeutic Community. Pub. March '61, 338 pp., 15 il., $9.75 ***New***

Albert Scheflen

PSYCHOTHERAPY OF SCHIZOPHRENIA. Pub. Feb. '61 (Amer. Lec. Psychology), 304 pp., 1 il., $8.50 ***New***

Alexander Simon, Charles C. Herbert, and Ruth Straus

THE PHYSIOLOGY OF EMOTIONS. Pub. March '61, about 233 pp. ***New***

Roy L. Swank

BIOCHEMICAL BASIS OF MULTIPLE SCLEROSIS. Pub. Jan. '61, 100 pp., 23 il. (Amer. Lec. Living Chemistry), $5.00 ***New***

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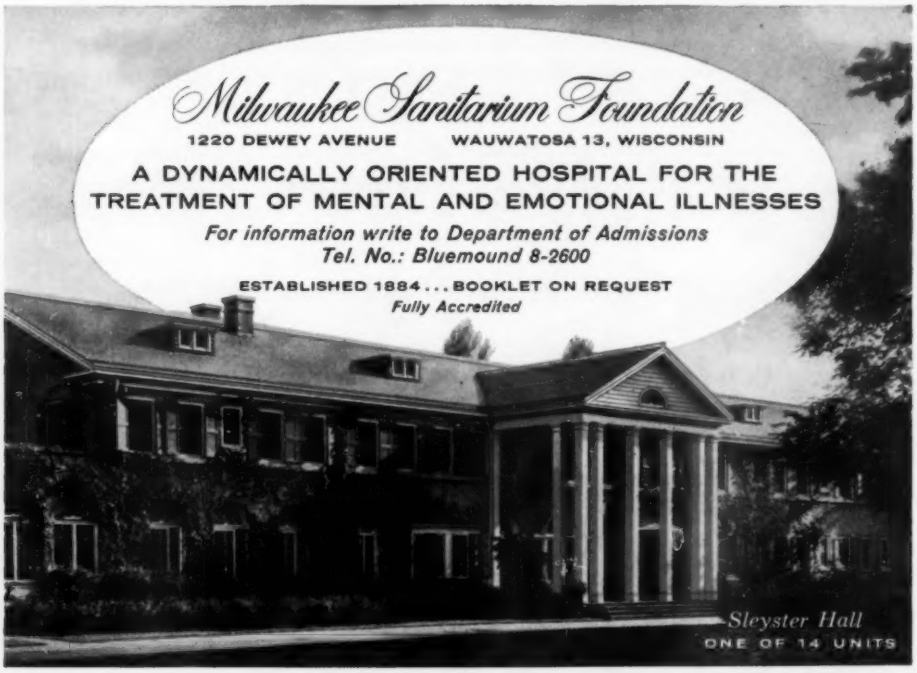

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A non-profit psychiatric institution, offering modern diagnostic and treatment procedures—insulin, electroshock, psychotherapy, occupational and recreational therapy—for nervous and mental disorders.
The Hospital is located in a 75-acre park, amid the scenic beauties of the Smoky Mountain Range of Western North Carolina, affording exceptional opportunity for physical and nervous rehabilitation.
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prompt, continuous and prolonged antispasmodic action for 6 to 9 hours with a single tablet

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- Exceptionally effective clinically because three-way mechanism of action in one molecule (anticholinergic, musculotropic, ganglion-blocking) exerts synergistic spasmolytic effect
- Complementary action permits significantly low dosage and reduces reaction potential of any one mechanism
- Remarkably free from drug-induced complications such as mouth dryness, visual disturbances, urinary retention

Suggested Average Dosage: 40 to 80 mg. daily, depending on condition and severity. The higher range of dosage is usually required in spasm of the genitourinary and biliary tracts. One "Murel"-S.A. Sustained Action Tablet morning and evening. *When anxiety and tension are present,* "Murel" with Phenobarb-S.A. is suggested.

Available as: No. 315—"Murel"-S.A., 40 mg. Valethamate bromide; and No. 319—"Murel" with Phenobarb-S.A., with ½ gr. phenobarbital, present as the sodium salt. Both in bottles of 100 and 1,000.

Also available: "Murel" Tablets No. 314—10 mg. Valethamate bromide; "Murel" with Phenobarbital Tablets No. 318—10 mg. Valethamate bromide and ¼ gr. phenobarbital.

"Murel" Injectable No. 405—10 mg. Valethamate bromide per cc.

Precautions: As with other antispasmodic agents, caution should be exercised in patients with prostatic hypertrophy, glaucoma, and in the presence of cardiac arrhythmias.

References available on request.

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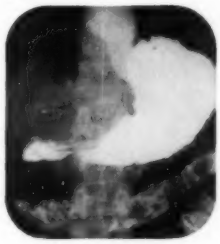
for acute, severe episodes
"MUREL" Injectable

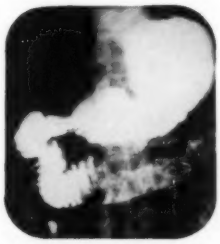
Female patient, age 55, complaining of nausea and epigastric discomfort after meals.

Diagnosis: Hiatus hernia and gastric ulcer.



1 hour after barium administration: Retention of barium due to spasticity of the gastric outlet, and incomplete visualization of the pylorus, duodenum and duodenal sweep. (Some barium has entered the small bowel.)

20 minutes after administration of "Murel" 2 cc. I.V.: Barium entering duodenum and duodenal sweep as spasticity is relieved.



10 minutes later: Good filling of the gastric outlet as well as of the duodenal sweep.

Medical Records of Ayerst Laboratories 6027